

(27,244)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1920.

No. 158.

SILVER KING COALITION MINES COMPANY, PETITIONER,

vs.

CONKLING MINING COMPANY.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT
OF APPEALS FOR THE EIGHTH CIRCUIT.

INDEX.

	Original.	Print.
Caption to transcript from U. S. district court.....	a	1
Affidavit of Nicholas Treweek in the case of Nicholas Treweek <i>et al. vs. Silver King Coalition Mines Company et al.</i> in support of motion for an order to inspect and survey the mining property of the Silver King Coalition Mines Company.	1	2
Order in the case of Nicholas Treweek <i>et al. vs. Silver King</i> <i>Coalition Mines Company et al.</i> granting survey, etc., of min- ing property of Silver King Coalition Mines Company.....	5	5
Amended bill of complaint.....	6	6
Replication to amended answer.....	25	22
Stipulation <i>in re</i> certain pleadings.....	25	22
Order, December 16, 1911, granting leave to file amended an- swer, etc.....	26	23
Amended answer to amended bill of complaint.....	26	23
Opinion of district court, filed November 28, 1916, as to defend- ant's motion to reopen the case for the introduction of fur- ther testimony, etc.....	50	43

Opinion of the district court, filed January 4, 1917, as to defendant's motion to reopen the case and plaintiff's motion for a decree in accordance with the mandate of the U. S. circuit court of appeals.....	51	44
Opinion of the district court, filed February 27, 1918, as to accounting	52	45
Decree of the district court, March 27, 1918.....	62	53
Stipulation as to the opinion of the district court, filed February 27, 1918, being made a part of the record.....	62	53
Order, April 17, 1918, making opinion filed February 27, 1918, part of the record in this case.....	63	54
Statement of evidence.....	63	54
Caption	63	54
Amended bill of complaint.....	63	54
Amended answer to amended bill of complaint.....	82	69
Recital of decree of district court of August 5, 1912.....	106	89
Recital of opinion of U. S. circuit court of appeals, February 12, 1916.....	106	89
Defendant's motion to reopen the case for the introduction of further testimony.....	106	90
Notice of defendant's motion to reopen case.....	107	90
Affidavit of James Humes in support of motion to reopen the case.....	108	91
Thomas Kearns in support of motion to reopen the case.....	111	93
R. H. Browne in support of motion to reopen the case.....	112	94
Interlocutory decree of the district court, January 20, 1917.	113	95
Defendant's statement as to ore mined from Conkling claim, etc.....	115	97
Schedule 1.....	121	104
Amended statement as to ore mined from Conkling mining claim, etc.....	123	106
Schedule 1.....	130	114
Proceedings, May 14, 1917, defendant granted leave to file amended statement of account, etc.....	131	115
Testimony for defendant.....	132	116
Testimony of Charles P. Brooks.....	132	116
Data of development work done on the Conkling and Arthur claims, 1902, to April, 1916.....	140	123
Testimony of Thomas L. Walden.....	155	135
C. P. Brooks (recalled).....	160	139
Andrew L. Hurley.....	178	153
Thomas Kearns.....	186	160
Frank O. Hawkinson.....	187	160
Michael J. Dalley.....	188	161
David Keith.....	194	166
M. J. Dalley (recalled).....	195	166
Letter, Nicholas Treweek <i>et al.</i> to Silver King Coalition Mines Company, December 19, 1907..	204	174

INDEX.

iii

	Original.	Print.
Letter, Thomas Kearns to Nicholas Treweek <i>et al.</i> , January 2, 1908.....	206	174
Letter, N. Treweek <i>et al.</i> to Silver King Coalition Mines Company, January 8, 1908.....	206	175
Testimony of C. P. Brooks (recalled).....	212	180
Edwin S. Maxim.....	213	181
William Barben.....	214	182
George Prudence.....	218	183
George McCarrell.....	217	184
John McClean.....	218	185
Emil Bjork.....	220	186
Excerpt of record showing time of witness as sta- tion tender in 1908.....	220	187
Testimony of John Forsman.....	221	187
Stipulation as to defendant's statement of account.....	222	188
Testimony of M. J. Dalley (recalled).....	222	188
Cornelius J. O'Neill.....	223	189
Barj Mahoney.....	227	192
Benjamin Lloyd.....	230	195
James Toole.....	234	197
George D. Blood.....	237	200
Edward McGurrian.....	241	204
Exhibit 47—Option agreement between D. P. Rohl- fing and Belmont Mining Company and assign- ment thereof.....	242	204
Testimony of J. B. Scholefield.....	244	206
Eugene Slusser.....	248	209
James Toole (recalled).....	250	210
Arthur McDonald.....	251	212
J. W. Edmunds.....	254	214
Daniel McCann.....	256	215
George Holland.....	260	219
Cornelius J. O'Neill (recalled).....	261	220
Daniel McCann (recalled).....	264	222
C. P. Brooks (recalled).....	264	222
Harry G. Hume.....	267	225
Knight L. Clapp.....	269	226
Sam Sgro.....	270	227
Lee Johnson.....	271	227
M. J. Dalley (recalled).....	272	228
C. P. Brooks (recalled).....	273	229
Certificate of assay of Exhibit 59.....	275	230
Certificate of assay of Exhibit 60.....	276	231
Certificate of assay of Exhibit 61.....	276	231
Certificate of assay of Exhibit 62.....	276	232
Certificate of assay of Exhibit 63.....	276	232
Testimony of J. B. Scholefield (recalled).....	281	236
C. P. Brooks (recalled).....	289	242
M. J. Dalley (recalled).....	289	243
J. B. Scholefield (recalled).....	290	244

INDEX.

	Original.	Print.
Testimony of M. J. Dailey (recalled).....	291	244
Cornelius J. O'Neill (recalled).....	292	245
James Humes.....	293	246
John W. Christy.....	312	262
Frank Anderson.....	312	263
J. B. Scholefield (recalled).....	313	263
Thomas Kearns (recalled).....	313	264
David Keith.....	316	266
C. P. Brooks (recalled).....	317	266
Arthur McDonald (recalled).....	321	270
Cornelius J. O'Neill (recalled).....	322	271
Daniel McCann (recalled).....	323	272
Frank J. Hansen.....	323	272
William F. Devlin.....	324	273
Frank J. Hansen (recalled).....	329	277
J. B. Scholefield (recalled).....	329	278
C. P. Brooks (recalled).....	330	278
F. J. Hansen (recalled).....	330	278
Exhibits	331	279
Exhibit 104—Contract between Silver King Mining Company and the American Smelting & Refin- ing Company, September 19, 1903	331	279
105—Contract between the Silver King Coalition Mines Com- pany and the American Smelting & Refining Com- pany, June 14, 1907.....	335	282
106—Memorandum agreement, June 14, 1917.....	338	285
107—Assignment of contract between the Silver King Coalition Mines Company and F. Au- gust Heinze, May 21, 1907, to Miners Smelting Company, July 3, 1907.....	339	285
Schedule A—Contract between the Silver King Coalition Mines Company and F. Au- gust Heinze, May 21, 1907...	340	286
Excerpt of minute book of the board of directors of the Sil- ver King Coalition Mines Company	343	289
Entries in assay book of de- fendant	345	291
Testimony of C. P. Brooks (recalled).....	357	302
Testimony of Thomas Kearns (recalled).....	357	303
Stipulation as to David Keith (recalled).....	357	303

INDEX.

v

	Original.	Print.
Testimony for plaintiff.....	358	360
Testimony of Frank Anderson.....	358	360
John C. Whitta.....	362	367
Frank Walker.....	363	368
David H. Williams.....	366	370
J. H. Finnegan.....	368	371
Harry Stephens.....	369	373
John C. Whitta (recalled).....	373	376
Edward H. Prudence.....	373	376
P. F. Ryan.....	374	377
Samuel Treweek.....	375	378
Samuel P. Parker.....	378	380
James Humes.....	380	382
Tom Luchinetti.....	381	383
Daniel McCann.....	382	384
J. M. Bidwell.....	383	385
Samuel P. Parker (recalled).....	388	389
William J. Lindberg.....	385	374
Mathew Sherlock.....	386	386
Charles Manguson.....	387	386
Wilson A. Howard.....	388	387
Jack Eddy.....	402	340
Charles Ely.....	402	341
Harry D. Taylor.....	407	345
Transcript of Taylor's figures on blackboard.....	420	355
Testimony of F. J. Hanson (recalled).....	421	357
Testimony for defendant in rebuttal.....	423	358
Testimony of Frank Anderson.....	423	358
Testimony of H. P. Taylor.....	423	358
Report of Messrs. Ellis and Anderson on Defendant's Exhibits 59, 60, 61, 62, and 63 and Plaintiff's Exhibit 109.....	423	358
Testimony of F. J. Hanson (recalled).....	424	359
C. P. Brooks (recalled).....	425	360
C. J. O'Neill (recalled).....	426	361
Recital of the filing of defendant's brief.....	426	361
Summary of defendant's receipts and disbursements, etc. (except of defendant's brief).....	426	361
Recital of the filing of plaintiff's brief.....	434	370
Excerpt of plaintiff's brief.....	434	371
Recital of the filing of defendant's reply brief.....	434	371
Petition of defendant for leave to file an amended account.....	435	371
Affidavit of Thomas Marionaux in support of petition for leave to file an amended account, etc.....	440	375
Amended account of Silver King Coalition Mines Company for development work done on Conkling and Arthur claims.....	441	376
Schedule 1.....	448	384

	Original.	Print.
Exhibit A—Affidavit of J. E. Scholesfield in support of defendant's petition for leave to file an amended account, etc.....	449	383
Exhibit B—Affidavit of William Reid in support of defendant's petition for leave to file an amended statement of account, etc.....	456	392
Recital of order granting defendant leave to file an amended statement of account.....	459	394
Excerpt of proceedings at the hearing on defendant's petition for leave to file an amended statement of account	459	395
Affidavit of W. H. Dickson in support of defendant's petition for leave to file an amended statement of account, etc.....	462	397
Opinion of the district court, filed February 27, 1918, as to accounting.....	465	398
Plaintiff's statement of amount due from defendant on accounting	472	406
Notice of defendant's statement of amount due plaintiff on accounting, etc.....	480	415
Defendant's statement of amount due plaintiff on accounting, etc.....	481	415
Defendant's exhibits.....	491	426
Defendant's Exhibit 1—Map A, showing development work done on the Conkling and Arthur claims, 1902 to April, 1916.....	491	426
2—Map, sheet No. 1, showing work done on the Conkling and Arthur claims, 1906 to 1910	492	426
2—Map, sheet No. 2, showing workings below tunnel level and stoping done on Conkling and Arthur claims, 1912 to April, 1916.....	493	426
4—Map, sheet No. 3, showing workings above tunnel level done on Conkling and Arthur claims, 1919 to April, 1916	494	426
Defendant's Exhibits 5 to 20, inclusive—Maps showing vertical section, No. 9 to section No. 15, inclusive, taken through the ground, as shown in Defendant's Exhibit 2 (looking east, sections 10 feet apart).....	495	426
5—Section No. 9.....	496	426
6—Section No. 1.....	497	426

INDEX.

vii

	Original.	Print.
Defendant's Exhibit		
7—Section No. 2.....	498	426
8—Section No. 3.....	499	426
9—Section No. 4.....	500	426
10—Section No. 5.....	501	426
11—Section No. 6.....	502	426
12—Section No. 7.....	503	426
13—Section No. 8.....	504	426
14—Section No. 9.....	505	426
15—Section No. 10.....	506	426
16—Section No. 11.....	507	426
17—Section No. 12.....	508	426
18—Section No. 13.....	509	426
19—Section No. 14.....	510	426
20—Section No. 15.....	511	426
24—Sketch map of the Alliance tunnel and workings from the mouth to the west end..	512	426
Plaintiff's Exhibit 45—Map of Conkling claim and where work was stopped in 1910 west of the 135-foot line, except the Columbia raise.....	513	426
46—Letter, Conkling Mining Company to Silver King Coalition Mines Company, November 30, 1908...	515	427
48—Final summary, subject to elimina- tion of ore not from Conkling ground	518	430
68—Extract of ore sales from the Sil- ver King Coalition Mines Com- pany during the period May 11, 1907, to March 31, 1916.....	520	432
70—Record of crude ore sold by the Kearns-Keith Mining Company during May and June, 1907.....	524	436
Defendant's Exhibit 85—Map showing surface of what is known as the Belmont Mining Company's ground, etc.....	525	436
86—Extract of ore sales from Silver King Coalition Mines Company for October, November, and December, 1906.....	527	437
91—Report of James Humes, super- intendent of the Silver King Coalition Mines Company, for 1914	528	438
92—Report of James Humes, super- intendent of the Silver King Coalition Mines Company, for 1915	533	442

	Original.	Print.
Defendant's Exhibit 96—Excerpt of shift bosses' ore extraction book of the Silver King Coalition Mines Company (page headed "Alliance First Class, June 1 to December 31, 1916")	538	447
97—Excerpt of shift bosses' ore extraction book of the Silver King Coalition Mines Company (page headed "Rock Drills")	539	449
100—Surface map of the Silver King Coalition Mines Company.....	541	449
Plaintiff's Exhibit 116—Summary of cost analysis sheet of Silver King Coalition Mines Company for 1915.....	543	450
Plaintiff's Exhibit 117—Summary of cost analysis sheet of Silver King Coalition Mines Company for 1914.....	544	452
Stipulation as to transcript of record.....	546	454
Approval of statement of evidence, etc., by district judge..	546	454
Petition for appeal of the Silver King Coalition Mines Company	547	455
Assignment of errors on appeal of the Silver King Coalition Mines Company.....	548	456
Order allowing appeal of the Silver King Coalition Mines Company'	565	471
Supersedeas bond on appeal of the Silver King Coalition Mines Company	566	471
Order enlarging time to file transcript.....	567	472
Stipulation for the transmission of certain original exhibits to the U. S. circuit court of appeals.....	567	473
Præcipe of the Silver King Coalition Mines Company for transcript	569	474
Additional præcipe of the Silver King Coalition Mines Company for transcript.....	572	476
Amended præcipe of the Silver King Coalition Mines Company for transcript.....	572	476
Citation on appeal of the Silver King Coalition Mines Company and admission of service.....	573	477
Clerk's certificate to transcript.....	574	478

INDEX TO No. 5190.

ix

	Original.	Print.
Petition for and order allowing appeal of the Conkling Mining Company	578	482
Assignment of errors on appeal of the Conkling Mining Company	579	483
Bond on appeal of the Conkling Mining Company.....	581	485
Præcipe of the Conkling Mining Company for transcript.....	582	486
Citation on appeal of the Conkling Mining Company and acceptance of service.....	583	487
Clerk's certificate to transcript.....	584	487
Appearance of counsel for appellant in cause No. 5188.....	586	489
Appearance of counsel for appellee in cause No. 5188.....	586	489
Appearance of Mr. William D. McHugh as counsel for appellant in cause No. 5190.....	586	489
Appearance of Mr. E. B. Critchlow, Mr. William W. Ray, Mr. William J. Barrette, and Mr. William H. King as counsel for appellant in cause No. 5190.....	586	490
Appearance of counsel for appellee in cause No. 5190.....	587	490
Order of argument.....	587	491
Order of submission.....	588	491
Opinion of U. S. circuit court of appeals.....	588	492
Decree of U. S. circuit court of appeals.....	604	505
Petition for rehearing in cause No. 5188.....	607	506
Motion to send up additional parts of the record and affidavits in support thereof in cause No. 5188.....	629	526
Order denying petition for rehearing and motion for an order requiring district court to send up additional parts of record	651	544
Motion for stay of mandate.....	651	544
Order staying mandate.....	655	548
Additional supersedeas bond of Silver King Coalition Mines Company	656	548
Præcipe for transcript for Supreme Court on return to writ of certiorari in Nos. 5188 and 5190.....	658	550
Order for substitution of exhibits and transmission of exhibits to Supreme Court U. S. on writ of certiorari.....	661	552
Writ of certiorari and clerk's return.....	665	554
Clerk's certificate to transcript.....	667	555

a Pleas and proceedings in the United States Circuit Court of Appeals for the Eighth Circuit, at the December Term, 1918, of said Court, before the Honorable Walter H. Sanborn and the Honorable Kimbrough Stone, Circuit Judges, and the Honorable James D. Elliott, District Judge.

Attest:

[Seal United States Circuit Court of Appeals, Eighth Circuit.]

E. E. KOCH,
*Clerk of the United States
Circuit Court of Appeals
for the Eighth Circuit.*

Be it Remembered that heretofore transcripts of record pursuant to appeals allowed by the District Court of the United States for the District of Utah were filed in the office of the Clerk of the United States Circuit Court of Appeals for the Eighth Circuit, in certain causes wherein the Silver King Coalition Mines Company was Appellant, and the Conkling Mining Company was Appellee, in which cause the transcript of record was filed and docketed in said Circuit Court of Appeals on June 26, 1918, as No. 5188, and also wherein the Conkling Mining Company, a corporation, was Appellant, and the Silver King Coalition Mines Company was Appellee, in which cause the transcript of record was filed and docketed on June 27, 1918, as No. 5190. Said transcripts as prepared and printed under the rules of the United States Circuit Court of Appeals for the Eighth Circuit, under the supervision of its Clerk, are in the words and figures following, to-wit:

1 UNITED STATES OF AMERICA,
District of Utah, ss:

At a regular stated term of the District Court of the United States for the District of Utah, in the Central Division thereof, begun and held in the Court room in the Federal Building, at Salt Lake City, on the 8th day of April, in the year of our Lord one thousand nine hundred and eighteen and the one hundred and forty-second of the Independence of the United States of America.

Present: Honorable Tillman D. Johnson, United States District Judge for the District of Utah.

TRANSCRIPT OF THE RECORD.

In Equity.

No. 2125 (307).

CONKLING MINING COMPANY, a Corporation, Plaintiff,

vs.

SILVER KING COALITION MINES COMPANY, a Corporation, Defendant.

Affidavit of Nicholas Treweek

in support of a motion for an order to inspect and for a survey, filed in the Circuit Court of the United States for the District of Utah on the 1st day of June, 1908, as follows, to-wit:

In the Circuit Court of the United States, Eighth Circuit, in and for the District of Utah.

NICHOLAS TREWEEK and J. LEONARD BURCH, Plaintiffs,

vs.

SILVER KING COALITION MINES COMPANY, a Corporation, and JOHN M. DAUGHERTY, Defendants.

Nicholas Treweek, first being duly sworn deposes and says:

That he is of the age of 57 years and for 35 years past has been and is a resident of Salt Lake City, Utah, and is one of the plaintiffs in the above entitled action. That he is by profession and occupation, a mining engineer and miner, and has had very large experience in his profession and business in vein, lode or ledge mining for gold, silver and lead and other metals, and especially in the 2 Uintah Mining District, Summit County, Utah. That he is now manager of and directing the development work of the Wabash Mining Company's mine in said District; and from time to time in the last thirty years has been the manager of other large and extensive mining enterprises in other places than said Uintah Mining District. That the affiant is in charge of matters and things pertaining to the prosecution of the above entitled action. That he is one of the owners of the Arthur and Conkling lode mining claims described in the complaint and the subject matter of the above entitled action, especially with the surface conditions and to some extent the underground workings of the same made by the defendant company or its predecessor in interest of the Alliance Tunnel in so far as he has been permitted to examine and observe the same by the Defendant Company.

That affiant is also and for many years last past has been acquainted with the mining claims of the Defendant Company in said mining district adjoining and near by to said Conkling and Arthur

mining claims in a general way and to some extent to the underground workings therein in so far as permitted by Defendant Company to inspect and examine same.

That the portion of the underground workings of said Arthur and Conkling mining claims that he has been so permitted to inspect and examine, affiant is informed and believes is a small portion of the underground workings of the said Arthur and Conkling mining claims made by the Defendant Company or its predecessors.

That the Alliance Tunnel the affiant is informed and believes is owned by the Defendant Company and that the Defendant Company or its predecessors in interest thereof has run same into and underneath the surface and at great depth through the said Arthur and Conkling mining claims and beyond the southwest end line of the said Conkling claim and into and underneath the surface of mining claims belonging to Defendant Company the distance of which affiant does not know, and through said Alliance Tunnel has mined, and is mining and intends to mine the ores in dispute in this action within and underneath the surface of said Arthur and Conkling mining claims; and also through which tunnel Defendant Company is mining and intends to mine and is transporting and intends to transport the ores mined by it from the same ore body or same vein, lode or ledge lying beneath the surface of said mining claims owned by the defendant company, but that the defendant company

3 has refused and continues to refuse to the plaintiffs and the affiant, further entrance into and upon said Alliance tunnel, and has excluded and refused affiant admission thereto and will not permit him or any one in the interest of the plaintiff to approach or inspect any portion of said tunnel that lies within about 135 feet northeasterly back towards the face of the tunnel from the vertical plane drawn down vertically through the southwest end line of the said Conkling mining claim, as called for in the field notes of the patent survey therefor.

That the Defendant Company claims to be the owner of the Walker and Walker Extension, Brave Columbia, Constitution, and Cumberland lode mining claims, and that the vein, lode or ledge upon which is deposited said ore body apexes within said Walker and Walker Extension, Brave Columbia, Constitution, and Cumberland mining claims in such position that the Defendant Company has extralateral rights thereto, that is, the right to follow same on its dip into and underneath the surface of said Arthur and Conkling mining claims, and to own, mine and remove ores therefrom lying underneath and within the surface of said Arthur and Conkling mining claims, and contained within vertical planes drawn downward through the exterior boundaries of said Arthur and Conkling mining claims.

The affiant further says that the issues in the foregoing action is, where the true apex, strike or dip of said vein, lode, ledge or ore body encountered by the Defendant Company or its predecessors in said Alliance tunnel and underneath the surface of said Arthur and Conkling mining claims and within vertical planes drawn downward

through the exterior boundary of said claims, and the ownership of said vein, lode, ledge or ore body is to be determined.

That the plaintiff nor affiant cannot from the examination that he has been permitted to make, determine the true position of the apex of said alleged vein, lode or ledge or said ore body, nor the true strike and dip of the same without being given unobstructed access to every part of said Alliance tunnel, to its ultimate end, and also all drifts, winzes, upraises, and stopes made from that part of said tunnel after it passes into said Arthur claim and departs from the Conkling mining claim and into the ground adjoining and belonging to defendant company and to the faces thereof;

And also to that end it will be absolutely necessary to examine and inspect the underground workings within said Walker and

Walker Extension, Brave Columbia, Constitution and Cumberland mining claims; and also examination and inspection of the following named tunnels; Hanauer tunnel which runs generally in a southwesterly direction; the Etna tunnel which runs generally in a southeasterly direction, but on a higher level and are connected by a winze; the Apex tunnel which runs generally in a southeasterly direction. These tunnels are more or less cross-cuts to the general course of the formation through which they are constructed and that they or some one of them may or would likely encounter said vein, lode or ledge on its dip if such vein, lode or ledge in fact exists and did apex, strike and dip as claimed by defendant company.

The affiant further says that the veins, lodes or ledges or ore bodies in place in the said Arthur and Conkling mining claims, and those of the adjoining and adjacent mining claims of the defendant company are covered and kept from view by loose earth, gravel and rock, commonly called wash, to the depth of so many feet that their apex or apexes do not come to or reach the surface and therefore cannot be discovered or traced on the surface, but must be done wholly from examination and inspection in underground workings as they exist in said mining claims of plaintiff and those belonging to defendant company as hereinbefore set forth.

Affiant further says that all information to be obtained and that he desires to obtain by examination and inspection of the workings are intended to and will be used only for the purpose of ascertaining the extent and condition of said veins, lodes, or ledges or ore bodies lying underneath the surface and within vertical planes drawn down through the exterior boundary of said Arthur and Conkling mining claims, and to establish the rights of the plaintiff in the above entitled action.

That all of said inspections and examinations can be made without injury to defendant company.

That the Conkling vein, lode or ledge, deposit of ore, or ore channel as disclosed in the said Alliance tunnel, has a slight dip from the horizontal to the northwesterly from the tunnel level, and a corresponding departure upward therefrom, and if it so continues it would not apex within vertical planes drawn down through the exterior boundary of the defendant company's said Walker and Walker

Extension, Brave Columbia, Constitution and Cumberland mining claims or either of them.

And it is also necessary in the premises that in making such examinations and inspections to make such surveys of the same as the plaintiff, or affiant, may think relevant and proper,
5 and which will aid in the determination of the issues in said action.

The affiant attaches to this his affidavit Exhibit (A) and as part thereto a map showing the approximate relation of the said Arthur Conkling Mining claims to and with said Walker and Walker Extension, Brave Columbia, Constitution and Cumberland mining claims and other mining claims adjoining or adjacent and belonging in part to defendant company, and also the approximate relation of the said tunnels to said mining claims and the relative position which they bear towards each other and also the position of the vein, lode, ledge or deposit of ore in dispute in this action and lying underneath the surface of said Conkling mining claim as hereinbefore more particularly referred to.

NICHOLAS TREWEEK.

Subscribed and sworn to before me by Nicholas Trewweek, this 2nd day of June, 1908.

[SEAL.]

G. A. LAND,
Notary Public.

Service by copy admitted June 4, 1908.

Attorneys and of Counsel for the Defendant,
Silver King Coalition Mines Company.

Filed June 4, 1908.

JERROLD R. LETCHER,
Clerk.

(Order Granting Inspection and Survey of Mining Property of Silver King Coalition Mines Company.)

Made, Filed and Entered in the Circuit Court of the United States for the District of Utah on the 30th Day of June, 1908.

NICHOLAS TREWEEK and J. LEONARD BURCH, Plaintiffs,

VS.

SILVER KING COALITION MINES COMPANY, a Corporation, and JOHN M. DAUGHERTY, Defendants.

Motion of the plaintiffs in the above entitled action for surface and underground inspection and survey coming on regularly to be heard and all and singular upon the stipulation of the respective parties to said action made in open court.

It is hereby ordered that the plaintiffs with their experts, agents, and surveyors be and are hereby given the free and unmolested right

to enter upon and into the Hanauer tunnel, Etna tunnel and the Apex tunnel belonging to the defendant company, and also, upon and into the Alliance tunnel which on its course runs into, underneath and beyond the Arthur and Conkling mining claims described in the complaint from its commencement to its end, and also, into and upon all drifts, winzes, upraises or stopes from all parts thereof after it passes into and departs from said Arthur and Conkling mining claims and into the ground adjoining and belonging to the defendant company and to the face thereof, and also, to enter upon the surface and all underground workings of the Walker and Walker Extension, Brave Columbia, Constitution and Cumberland lode mining claims belonging to and described in the defendant company's answer, and to make such inspection and survey thereof as to the plaintiff's and their experts and surveyors may deem important and will illustrate and aid in determining the apex and dip of the vein, lode or ledge described in the answer of defendant as apexing within said last named mining claims belonging to defendant and to measure and determine the course and strike of apex of said vein and dip thereof, and also to measure and determine the amount and value of the ore that may have been mined by the defendant company from and underneath the surface of said Conkling and Arthur lode mining claims and to determine and measure the dip, strike and apex of the vein or lode upon which said ore body is deposited; all to be done in such way as to give as little inconvenience to both parties as circumstance will permit.

Done in open court the 30th day of June, A. D. 1908.

J. A. MARSHALL,
Judge.

Filed June 30, 1908.

JERROLD R. LETCHER,
Clerk.

Amended Bill of Complaint.

(Filed in the U. S. Circuit Court July 5, 1909.)

In Equity.

No. 307.

CONKLING MINING COMPANY, a Corporation, Complainant,

VS.

SILVER KING COALITION MINES COMPANY, a Corporation, Defendant.

To the Honorable the Judges of the Circuit Court of the United States in and for the District of Utah:

The Conkling Mining Company, a corporation organized and existing under the laws of the State of Utah, and a citizen of the State of Utah, by leave of this Court first had and obtained, files this, its

7 Amended Bill of Complaint, against the Silver King Coalition Mines Company, a corporation organized and existing under the laws of the State of Nevada, and a citizen of the State of Nevada; and thereupon your orator respectfully represents and alleges:

I.

That on or about the seventeenth day of September, A. D. 1908 Nicholas Treweek and J. Leonard Burch, the original complainants herein, caused your orator to be duly incorporated under the laws of the State of Utah for the purpose and pursuit of mining.

That the capital stock of your orator was paid for upon the incorporation of said company by a conveyance and transfer to your orator by said Nicholas Treweek and J. Leonard Burch of all their right, title and interest (being an undivided three-fourths) in and to the Conkling Lode Mining Claim, patented as U. S. Lot No. 689, and the Arthur Lode Mining Claim, patented as U. S. Lot No. 690, situated in the Uintah Mining District, County of Summit and State of Utah, and also by an assignment and transfer to your orator of all manner of actions and causes of actions, suits, dues, demands, controversies and accounting of every kind and nature whatsoever in favor of said Nicholas Treweek and J. Leonard Burch against the defendant herein.

II.

That said defendant corporation was organized and incorporated under the laws of the State of Nevada, on or about the month of May, 1907, to consolidate and take over sundry mining claims and properties, including the Kearns-Keith Mining Company and the Silver King Mining Company, respectively corporations, which said last-named companies theretofore and for a long time had been engaged in the business of mining in the Mining District where said Conkling and Arthur Lode Mining Claims are situated.

III.

That in and by said consolidation and merger the defendant corporation succeeded to the interest then and theretofore owned by said Kearns-Keith Mining Company in and to said Conkling and Arthur Lode Mining Claims, viz., an undivided one-fourth ($\frac{1}{4}$) interest therein.

That on or about the twenty-second day of September, 1903, said Kearns-Keith Mining Company, predecessor in interest and grantor of the defendant herein, became the owner of said undivided one-fourth ($\frac{1}{4}$) interest in and to said Conkling and Arthur Lode

8 Mining Claims, and ever since continued to be the owner thereof until the same was transferred to and merged in the defendant company as aforesaid, to wit, on or about the twenty-ninth day of May, 1907.

[III.]

That during all of the times said Kearns-Keith Mining Company was the owner of said undivided one-fourth ($\frac{1}{4}$) interest in said Conkling and Arthur Lode Mining Claims, the said Nicholas Treweek, as tenant-in-common with said Kearns-Keith Mining Company, was the owner of an undivided one-half ($\frac{1}{2}$) interest in and to said mining claims and each of them.

That upon the transfer by said Kearns-Keith Mining Company to the defendant as aforesaid, said Treweek continued to be a tenant-in-common with the defendant herein in said mining claims and each of them, and so continued to be until the transfer to your orator as here-before alleged.

IV.

That said J. Leonard Burch since on or about the sixteenth day of May, 1906, until the transfer to your orator herein, was the owner of an undivided one-fourth ($\frac{1}{4}$) interest in and to said Conkling and Arthur Lode Mining Claims. That as such owner since said sixteenth day of May, 1906, he was a tenant-in-common with said Kearns-Keith Mining Company in said mining claims and each of them until the time of the transfer by said Kearns-Keith Mining Company of its interests therein to the defendant herein, and since the time of said transfer he was a tenant-in-common with the defendant herein in said claims and each of them, until he transferred his interests to your orator as hereinbefore alleged.

V.

That on or about the twenty-third day of February, 1892 the United States of America by its letters patent granted to the Boss Mining Company, a corporation, those certain premises called the Conkling and Arthur Lode Mining Claims, respectively situated in the Uintah Mining District, County of Summit, then Territory, now State, of Utah, said Conkling Lode Mining Claim being particularly bounded and described in said patent, to wit,

"Bounded, described and platted as follows, with magnetic variation seventeen degrees and twenty minutes east.

Beginning at corner No. 1, a pine post four inches square, marked U. S. 689 p. 1.

9 Thence first course north twenty-one degrees and nine minutes west three hundred feet to discovery point six hundred feet to corner No. 2, a pine post four inches square marked U. S. 689 p. 2, being also corner No. 4, of Lot No. 191, the Lincoln lode claim, and corner No. 2 of Lot No. 580, the Pirate King lode claim from which U. S. mineral monument No. 4 bears north thirty-two degrees and fifty-two minutes west nine hundred and thirty-nine and three tenths feet distant, and a pine tree four inches in diameter marked U. S. 689 P. 2 B. T. bears north thirteen degrees west twenty-eight feet distant.

Thence second course, south sixty degrees and forty-five minutes west one thousand five hundred feet to corner No. 3.

Thence third course south twenty-one degrees and nine minutes east six hundred feet to corner No. 4.

Thence fourth course north sixty degrees and forty-five minutes east one thousand five hundred feet to corner No. 1, the place of beginning; said lot No. 689 extending one thousand five hundred feet in length along said Conkling vein or lode, and containing twenty acres and forty-five hundredths of an acre of land more or less."

And said Arthur Lode Mining Claim being particularly bounded and described in said patent, to wit:

"Bounded, described and platted as follows, with magnetic variation seventeen degrees and twenty minutes east.

Beginning at Corner No. 1, a pine post four inches square, marked U. S. 690 P. 1, with mound of stones being also corner No. 1 of Lot No. 689, the Conkling Lode claim.

Thence first course, north twenty-one degrees and nine minutes west, three hundred feet to discovery point, six hundred feet to corner No. 2, a pine post four inches square marked U. S. 690 P. 2, in mound on stones, being also corner No. 2 of said Lot No. 689, corner No. 2, of Lot No. 589, the Pirate King Lode Claim, and corner No. 4, of Lot No. 191, the Lincoln Lode Claim, from which U. S. Mineral Monument No. 4 bears north thirty-two degrees and fifty-two minutes west nine hundred and thirty-nine and three-tenths feet distant; and a pine tree four inches in diameter marked U. S. 690 P. 2 B. T. in mound of stones bears north thirteen degrees west thirty-eight feet distant.

10 Thence, second course, north seventy-six degrees and fifty-seven minutes east nine hundred and fifty-one and eight tenths feet to corner No. 3.

Thence third course south, twenty-one degrees and nine minutes east one hundred and thirty eight and eight tenths feet intersect line 2-3, of Lot No. 342, the Pay Rock No. 2, lode claim, at north seventeen degrees and twenty minutes east one hundred and thirty-two and four tenths feet from corner No. 3, three hundred feet intersect line 3-4 of said lot No. 342, at south seventy-two degrees and forty minutes east one hundred and five and three-tenths feet from corner No. 3 six hundred feet to corner No. 4.

Thence fourth course south seventy-six degrees and fifty-seven minutes west nine hundred and fifty-one and eight tenths feet to corner No. 1, the place of beginning. Expressly excepting and excluding from these presents all that portion of the ground heretofore described embraced in said mining claim or survey No. 342, and also all that portion of said Arthur vein or lode, and of all veins, lodes and ledges, throughout their entire depth, the tops or apexes of which lie inside of such excluded ground; said Lot No. 690 extending nine hundred and fifty-one and eight tenths feet in length along said Arthur vein or lode, the granted premises in said lot containing twelve acres and eighty-two hundredths of an acre of land, more or less."

VI.

That under and beneath the surface and within the exterior boundaries of each of said mining claims extended downward vertically, there is a lode or vein or rock in place, bearing silver, lead and other valuable minerals, extending on its course or strike through the length of said claims. That said mining claims and each of them are only valuable for the ores and minerals therein contained.

VII.

That, as your orator is informed and believes, ever since the incorporation of said defendant company the defendant herein has been and still is in possession of said vein or lode, within the premises hereinbefore described and all the ores and minerals therein, working and developing the same and extracting said ores and minerals therefrom. Also upon information and belief, your orator alleges that prior to the incorporation of the defendant as hereinbefore alleged, its said grantor and predecessor in interest,
11 the Kearns-Keith Mining Company was in possession of said vein or lode and all the ores and minerals therein within the planes aforesaid, working and developing the same and extracting the ores and minerals therefrom.

That said defendant and said Kearns-Keith Mining Company gained access to said Mining Claims and premises and said ores, beneath the surface and within the said boundaries of said mining claims extended downward vertically, by means of extending certain underground works situated upon other property, now owned by the defendant and prior to the incorporation of the defendant company owned by said Kearns-Keith Mining Company and Silver King Mining Company, which were merged into the defendant company as hereinbefore alleged, and to which said underground works your orator herein and its said grantors and predecessors in interest have had no access or means of access, and from which they have been, and your orator is and has been, excluded by said defendant, except as permitted to enter by the order of the Court herein, made on the 30th day of June, 1908.

VIII.

That, as your orator is informed and believes, the defendant herein, since its said incorporation, and said Kearns-Keith Mining Company, the grantor of said defendant, prior thereto, by means of said underground works, have extracted large quantities of ore from said Conkling and Arthur Lode Mining Claims within the planes aforesaid. That the ores so extracted by the defendant and its said grantor, said defendant has appropriated and converted to its own use. That the value of said ores, so extracted by the defendant and its said grantor, your orator is unable to specify with exactness,

but upon information and belief alleges the same to exceed in value the sum of one million dollars (\$1,000,000.00).

IX.

Your orator further alleges that said grantors of your orator did, prior to the commencement of this action, demand from said defendant that it account to them, as tenants-in-common with it in said mining claims, for the ores and minerals by it and its said grantor removed from said premises and disposed of, and for their just and proper share of the value thereof. That said defendant company failed and refused to give to said grantors of your orator any accounting whatsoever for the ores or minerals by said defendant company extracted and removed from said premises, or

12 to pay to them or either of them their just, or any, proportion of the value thereof.

That after the incorporation of your orator, and after your orator succeeded to the rights and interests of said Nicholas Treweek and J. Leonard Burch in and to said mining claims, and each of them, to-wit, on or about the thirtieth day of November, 1908, your orator demanded of said defendant an accounting as tenant-in-common in and to said mining claims and for your orator's just proportion of the value of the ores mined from underneath the surface of said Conkling and Arthur Lode Mining Claims between planes drawn down vertically through the exterior boundaries of said mining claims as herein described. That said defendant company has entirely ignored said demands and failed and neglected to make answer thereto, except as hereinafter alleged, and refused to let your orator into the possession of either of said mining claims, or to in any manner account to or with your orator in the premises.

X.

That the defendant asserts, pretends and claims as exclusive interest (not as Tenant-in-common with your orator) in a portion of said premises, to-wit, the southwest one hundred and thirty-five and one-half (135.5) feet of said Conkling Lode Mining Claim, as hereinbefore described, adverse to your orator, and to have exclusive right and ownership of all the ores contained therein within planes extended downward vertically from the following described lines: to-wit, bounded on the southwest by the southwest end line of said Conkling claim as hereinbefore bounded and described, and on the northeast by a line drawn parallel thereto and one hundred and thirty-five and five tenths feet distant therefrom, and by the respective side lines of said Conkling Mining Claim as hereinbefore described; and said defendant has given out in speech, and otherwise, that it has the exclusive right to enter in and upon said premises and remove ore therefrom without accounting to your orator as a tenant-in-common with it as aforesaid, because of its alleged ownership of certain overlapping and conflicting mining claims called

the Custer No. 2 and Silver Hill No. 4, and also because it asserts that the boundaries of said Conkling Claim as described in the patent thereof and herein, are not the proper boundaries thereof to the extent of including the said southwest 135.5 feet of said Conkling Claim as hereinbefore described and bounded.

13 That the alleged claims and pretenses of said defendant are false and untrue, and unfounded in fact; also that by reason of the facts herein alleged the said defendant ought not to be permitted to controvert and vary the location and boundary of said Conkling Claim upon the ground as the same are described in said patent and herein, or to assert an interest adverse to your orator or otherwise, if at all, then as trustee holding the title of said overlapping and conflicting Silver Hill No. 4 and Custer No. 2 Lode Mining Claims for the benefit of the defendant and your orator as tenants-in-common in said Conkling Lode Mining Claim, according to their respective interest therein as hereinbefore alleged. That the description of the location of said Conkling Lode Mining Claim, as described herein, is the same and identical description as described in the patent and as patented. That in and by said description contained in said patent, the location of the boundaries of said Conkling Lode Mining Claim can be readily traced, ascertained and determined upon the ground, all of which has, at all of the times herein mentioned, been well known to said Kearns-Keith Mining Company, and to the defendant herein, as your orator verily believes. That ever since said Conkling Lode Mining Claim was patented, the owners of said claim have never had any dispute or contention over, or disturbance of their ownership and right of possession of said Conkling Lode Mining Claim as described herein and as located upon the ground by said description contained herein and in said patent, or of or to any part or portion of said claim until the wrongful acts and conduct of the defendant and its said grantor, Kearns-Keith Mining Company, as co-tenant or tenants-in-common with your orator and its grantors as herein alleged.

XI.

That the defendant herein and its said grantor Kearns-Keith Mining Company, subsequent to said twenty-second day of September, 1903 the actual time of which your orator has no means of ascertaining), as your orator is informed and believes, did secretly extend a certain tunnel called the Alliance Tunnel through and underneath said Conkling Lode Mining Claim from the Northeast boundary of said claim to the southwest end boundary of said claim; also secretly drove a cross-cut extending from said Alliance Tunnel, so extended underneath said Conkling Lode Mining Claim, to near the southwest corner of said Conkling Lode Mining Claim as described in said patent and herein. That said Alliance Tunnel at the time of the incorporation of said Kearns-Keith Mining

14 Company did not extend to the boundaries of said Conkling Lode Mining Claim, or any part or portion thereof, as your orator is informed and believes. That said tunnel and cross-cut,

so extended, are upwards of one thousand and three hundred (1,300) feet in depth below the surface of said Conkling Lode Mining Claim. That said secret openings so made underneath the surface and within the boundary planes of said Conkling Lode Mining Claim extended down vertically, can be entered through the main shaft of said Silver King Mining Company and the levels and drifts therefrom, or through said Alliance Tunnel, only; that said shaft, drifts, levels and said Alliance Tunnel are under the exclusive ownership and control of the defendant (except only as to the right reserved to Thomas Kearns, and his assigns, to use said Alliance Tunnel) and prior to said merger, during the time aforesaid were under the exclusive ownership and control of said Silver King Mining Company, with the right reserved to said Kearns or his assigns as aforesaid, which said right, so reserved, upon information and belief, your orator alleges said Kearns assigned and transferred to said Kearns-Keith Mining Company upon its incorporation. That in so drifting and extending said cross-cut from said tunnel, said defendant, and prior to said merger, said Kearns-Keith Mining Company, secretly discovered and explored a large and valuable ore deposit upon which said Kearns-Keith Mining Company, prior to said merger, and said defendant, subsequent thereto, secretly discovered and explored a large and valuable ore deposit, upon which the said defendant and its grantor have made extensive stoping and secretly removed therefrom ore of the value of not less than one million dollars (\$1,000,000.00) as your orator is informed and believes.

XII.

That the description of the said Conkling Lode Mining Claim as asserted and pretended to be by the defendant herein as aforesaid is such that it is within the boundary planes of said Conkling Lode Mining Claim, as described in the patent thereof as aforesaid, extended downward vertically, and principally within the boundary planes extended downward vertically of said southwest 135.5 feet of said Conkling Lode Mining Claim, as hereinbefore described, that the principal part and value of said ore so secretly found and discovered as aforesaid was and is contained.

That the value of said ores so found and discovered within the planes extended downward vertically from the boundaries
15 of said southwest 135.5 foot strip of said Conkling Lode Mining Claim, as hereinbefore described, is, as your orator is informed and believes, not less than two million five hundred thousand dollars (\$2,500,000.00).

That all of the aforesaid secret underground work and discovery of ore and removal of ore were intentionally and wrongfully kept secret by the said defendant and by its grantor, the Kearns-Keith Mining Company, from your orator's grantors and predecessors in interest, Nicholas Treweek and J. Leonard Burch, as your orator is informed and believes, and unknown to them or either of them until as hereinafter alleged. That on or about the month of April, 1907, the then owners of the interest now owned by your orator in said

Conkling Lode Mining Claim, to-wit, said Nicholas Treweek and J. Leonard Burch, became suspicious that there had been secret developments made in said Conkling and Arthur Lode Mining Claims by the said Kearns-Keith Mining Company, and thereafter, after said merger, applied to said defendant for admission to any underground workings beneath the surface of said Conkling and Arthur Lode Mining Claims; that said application was refused by the said defendant. That thereafter, on or about the month of December, 1907, said Nicholas Treweek and J. Leonard Burch, as tenants-in-common with the said defendant in said Conkling Lode Mining Claim as aforesaid, demanded of said defendant an accounting for their respective shares of the proceeds of any and all ores taken from said Conkling and Arthur Lode Mining Claims; that said defendant, in response to said demand, expressed great surprise at the demand made upon it as aforesaid, and reminded said Nicholas Treweek and J. Leonard Burch that the defendant was a co-tenant with them in the ground they claimed, viz., the Conkling and Arthur Lode Mining Claims, and also asserted that it had spent a great deal of money in explorations, and claimed the right to remove and extract sufficient ore, had there been any in the said Conkling and Arthur Lode Mining Claims, to repay the said defendant for the money expended in such explorations, before the said Nicholas Treweek and J. Leonard Burch, as tenants-in-common with said defendant, could set up any claim for an accounting. That in reference to the demand made for the privilege of entering the workings for the purpose of making an examination and survey, the defendant asserted and contended that such demand, so made, was not with the hope of finding the conditions in reference to the defendant having mined ore in said Conkling and Arthur Lode Mining Claims, as suspected,

16 but charged some ulterior and improper purpose or motive in said demand and request so made by said Treweek and Burch.

XIII.

Your orator further alleges that after the secret discovery by said defendant and its grantor, Kearns-Keith Mining Co., of ore of great value as aforesaid and within that portion of said Conkling Lode Mining Claim hereinbefore referred to as the southwest 135.5 feet thereof, and said Kearns-Keith Mining Company, the predecessor in interest and grantor of the defendant herein, as aforesaid, prior to the incorporation of the defendant, to-wit, in the years 1906 and 1907, made and caused to be made cunning efforts to purchase the interest in said mining claims owned by said Treweek and said Burch, representing that said interests were of no special value, and offering to pay for said interest the sum of fifteen thousand dollars (\$15,000.00) and no more. That the first suspicion said Treweek and Burch had of the possibility of there having been underground developments made in said Conkling and Arthur Lode Mining Claims as aforesaid, arose after the last attempt of said Kearns-Keith Mining Company to purchase their interest in said Conkling and Arthur Lode Mining Claims for said sum of fifteen thousand

dollars (\$15,000.00), and after the purchase of said Custer No. 2 and Silver Hill No. 4 Mining Claims, as herein alleged.

XIV.

Your orator further alleges that after failing to purchase the interest of said Treweek and Burch in said Conkling and Arthur Lode Mining Claims *are* aforesaid, the defendant's said grantor, Kearns-Keith Mining Company, did thereafter and during the month of April, 1907, purchase from the Belmont Mining Company, a corporation, for a consideration not exceeding one hundred fifty thousand dollars (\$150,000.00), as your orator is informed and believes, the Custer No. 2 and the Silver Hill No. 4 Lode Mining Claims, then owned by the said Belmont Mining Company, and took a conveyance for the same in the name of said Thomas Kearns, Trustee, who was then the President or Manager of said Kearns-Keith Mining Company. That upon the incorporation of the defendant herein said Thomas Kearns, as Trustee, wrongfully conveyed the said mining claims, and the whole thereof, exclusively to the defendant herein. That said Custer No. 2 and Silver Hill No. 4 lode mining

claims, Survey No. 4850, were, by Letters Patent dated June 17 2, 1904, granted from the United States of America to the Belmont Mining Company. That said Patent was based upon location notices antedating the location of said Conkling lode mining claim. That as patented, said Custer No. 2 and Silver Hill No. 4 lode mining claims, overlap and include a large area of said Conkling lode mining claim as patented and described in the patent thereof and herein, including within said overlap all of the area of said Conkling lode mining claim included within the southwest 135.5 foot strip thereof, except only a small area at the northwest corner of said Conkling lode mining claim as herein described, and particularly included within said overlap, all that portion of said 135.5 foot strip wherein said ore was discovered and contained as aforesaid.

That during all of the period aforesaid, while the said Treweek and Burch and the said Kearns-Keith Mining Company were tenants in common as aforesaid in said Arthur and Conkling lode mining claims, the said Kearns-Keith Mining Company and said Treweek and Burch were as tenants in common as aforesaid, in the actual possession of said claims and each of them, to the full extent and area thereof as herein specifically described, including said southwest 135.5 foot strip of said Conkling claim as herein described. That said purchase from said Belmont Mining Company of said Custer No. 2 and Silver Hill No. 4, was made as hereinbefore alleged while said Kearns-Keith Mining Company and said Treweek and Burch, as tenants-in-common, were in the possession as aforesaid of said Arthur and Conkling claims, including all the aforesaid overlapping area thereof covered by said Custer No. 2 and Silver Hill No. 4 lode mining claims. That at and prior to the time of the purchase of said Custer No. 2 and Silver Hill No. 4 mining claims as aforesaid, no ore had been found or developed within the said claims or either of them as your orator is informed and believes, ex-

cept the aforesaid ore bodies developed prior to said purchase within said area overlapping said Conkling mining claim as herein described and as patented, and as then and during all the times prior thereto while said Treweek and Burch and said Kearns-Keith Mining Company as tenants in common in said Conkling claim as aforesaid were as such tenants in common and not otherwise, in the lawful and actual possession thereof as part and parcel of said Conkling lode mining claim.

That until the purchase by the said Kearns-Keith Mining Company of the said Custer No. 2 and Silver Hill No. 4 lode mining claims, neither the said defendant nor its said grantors held or claimed any right or interest in or to the premises described in the patent of said Conkling lode mining claim, or in or to the lodes or veins within the boundary plane thereof as described in said patent, or in or to the southwest 135.5 foot strip, or in or to the lodes or veins therein, except the right and interest held by the said defendant and its grantor, the said Kearns-Keith Mining Company, as tenant in common with your orator and its predecessors in title under the patent and grant from the United States of America of the Conkling mining claim hereinbefore set forth; and after said purchase neither the said Kearns-Keith Mining Company, nor the defendant, made any independent claim nor any claim at all adverse to your orator, or adverse to the said Treweek and Burch in or to said premises or any part thereof until on or about the 11th day of April, 1908.

That in the secret extension of said Alliance Tunnel as hereinbefore set forth and continuously during the progress of said work, the said defendant and its said grantor carried on said work, claiming to be so operating as tenants in common with your orator and your orator's predecessors in title, said Treweek and Burch, and for the discovery and development of ore within the exterior boundaries extended downward vertically of said Conkling mining claim, and claimed of and from its co-tenants, payment and reimbursement out of the ores developed in said Conkling mining claim for the cost and expense incurred in said work. That while so carrying on said work as such tenant in common as aforesaid and while claiming to be carrying on the same for the development of said properties so held and claimed in common, and while claiming reimbursements, by reason of said co-tenancy, out of the ores within said Conkling mining claim for the cost and expense of extending said tunnel, the defendant's said grantor, the said Kearns-Keith Mining Company secretly discovered said ore body within said 135.5 foot strip, and fraudulently contriving to deprive its co-tenants of their just and any proportion of the value of said ore, and contriving and intending to secure to the said defendant's grantors, the benefit of the whole thereof, the said Kearns-Keith Mining Company secretly and without informing the orator's predecessors in title of the discovery of said ores, purchased as aforesaid said Custer No. 2 and Silver Hill No. 4 mining claims, and thereafter held the same secretly, and after developing the said ground and fully ascertaining the extent

19 of said ore bodies and the value of the ore contained therein,—for the first time made known to your orator's predecessors in title that the said Kearns-Keith Mining Company claimed adversely said 135.5 foot strip, and for the first time, pretended and claimed that said 135.5 foot strip was not within the boundaries or planes of said Conkling mining claim.

That said Kearns-Keith Mining Company secured title to said Custer No. 2 and Silver Hill No. 4 mining claims by reason of its possession of said premises under its claim thereto as tenant-in-common and under its claim that the same was part of the Conkling mining claim, and purchased said Custer No. 2 and Silver Hill No. 4 mining claims because of its knowledge obtained while extending said tunnel (and while so in possession as tenant in common with your orator's predecessors in title) of the valuable ore body within said 135.5 foot strip,—contriving and intending by means of such adverse claims, to deprive your orator and its predecessors in title of the ore discovered and partially extracted and sold by the said Kearns-Keith Mining Company while in possession of said property and of said 135.5 foot strip as tenant in common with your orator's predecessors in title, the said Treweek and Burch. That the said pretensions of the said defendant that the boundaries of said Conkling lode mining claim as described in the patent and herein are not its true boundaries, but that the southwest 135.5 feet of said Conkling lode mining claim, as the same is bounded and described in the patent and herein, should not be included therein when located upon the ground, constituted the first notice that said Treweek and Burch, or either of them, ever had that any such claim, pretension or contention existed, from any source whatsoever. That said claim and assertion first came to the notice or knowledge of said Treweek or Burch, or either of them, on or about the 11th day of April, 1908, as your orator is informed and believes.

XV.

Your orator further alleges that under and pursuant to an order of this Honorable Court, made herein on the thirtieth day of June, 1908, permitting the then complainants herein, Nicholas Treweek and J. Leonard Burch, with their experts, agents and surveyors, the free and unmolested right to enter upon the aforesaid underground workings for the purpose, among other things, of measuring and determining the amount and value of the ore that had been mined by the said defendant company underneath the surface of said

20 Conkling and Arthur Lode Mining Claims, the said Treweek and Burch were able for the first time to, and did, ascertain the actual facts in respect to said secret underground workings as aforesaid, underneath the surface boundaries of said Conkling Lode Mining Claim as described in said patent and herein, within planes extended downward vertically, and of the location of the ore body within said Conkling Lode Mining Claim, and the character and extent of the ore body developed therein, and of the importance

and great value of said Conkling Lode Mining Claim, which is only valuable for the ores therein contained.

XVI.

Your orator further alleges, upon information and belief, that the said defendant herein since it succeeded to the interest of said Kearns-Keith Mining Company in said Conkling Lode Mining Claim as aforesaid, and the said Kearns-Keith Mining Company prior thereto and subsequent to its purchase aforesaid, and while said companies were respectively as aforesaid tenants-in-common with said Treweek and Burch in said Conkling and Arthur Lode Mining Claims, and the discovery of ore therein and the extraction and removal of ore from said Conkling Lode Mining Claim, for the purpose of taking wrongful and undue advantage of said Treweek and Burch, as co-tenants as aforesaid, endeavored to purchase their said three-fourths interest therein for a trifling sum compared with the actual value as then known exclusively to the said defendant herein, and its said grantor, the Kearns-Keith Mining Company.

XVII.

Your orator further alleges upon information and belief, that said overlapping junior patented claims, to-wit, the Custer No. 2 and Silver Hill No. 4, were purchased as aforesaid without the knowledge, acquiescence or consent of said Treweek and Burch, or either of them, for the purpose and with the intention of defrauding said Treweek and Burch, and your orator, as tenants-in-common with the said defendant and its grantor, the Kearns-Keith Mining Company, in said Conkling Lode Mining Claim as aforesaid, out of their just and proper rights in the premises, and particularly from that portion of said Conkling Lode Mining Claim wherein the principal part and value of said ore, so secretly discovered as aforesaid, is contained. Also that the attempt on the part of the defendant herein to describe and locate the said Conkling Lode Mining Claim so as to exclude the southwest 135.5 feet thereof, as aforesaid, is made

21 with a like intention and purpose, as your orator is informed and believes. That neither your orator, nor its said grantors,

Nicholas Treweek and J. Leonard Burch, were ever notified by said defendant or its grantor, Kearns-Keith Mining Company, as it and they were in duty bound to do, of said purchase of said Custer No. 2 and Silver Hill No. 4 Mining Claims, or permitted to participate in said purchase. That ever since said purchase of said Custer No. 2 and Silver Hill No. 4 Claims as aforesaid, your orator since its incorporation has been, and prior thereto said Treweek and Burch were, and your orator still is, ready, able and willing to pay and contribute to the defendant for its proper share and proportion, to-wit, three-fourths ($\frac{3}{4}$) of the purchase price paid to said Belmont Mining Company for said claims, or such other or further sum as to Your Honors may seem meet; and here and now offers to pay the same as this Honorable Court may direct. That by reason of said

purchase of said claims by said defendant, your orator is, and its grantors have been, greatly and wrongfully prejudiced as tenants-in-common as aforesaid with said defendant and its said grantor in said Conkling Lode Mining Claim.

XVIII.

And your orator further shows and alleges that the survey of said Conkling Lode Mining Claim purports to have been made in November of the year 1889 by Adolph Jesson, now deceased, then Deputy United States Mineral Surveyor; that all other persons connected with the making of said survey of said Conkling Lode Mining Claim are either dead or their whereabouts unknown, as plaintiff is informed and believes; that said Conkling Lode Mining Claim is situated in a rough country, at a high altitude; that the surface is covered in part with large trees and thickets of brush and undergrowth; that the yearly snowfall in the winter is very great; that none of the original marks and boundaries of said Conkling Lode Mining Claim referred to in said patent are now standing; that the original place where the respective corners were marked, if marked at all, is now only a matter of speculation. That the defendant herein has upwards of forty (40) miles of underground workings, as your orator is informed and believes, which have been made by it and the companies which it succeeded, as hereinbefore alleged, and thereby its has, and they were enabled to secretly explore and determine the course, strike and dip of the mineral bearing veins and lodes, including the territory wherein the said Conkling Lode Mining Claim is situated; and with such knowledge and information, so gained, the said defendant and the said parties to which it succeeded as aforesaid have, as your grantor is informed and believes,

22 since secretly discovering said ore deposits, been secretly scheming and designing ways and means, by the methods hereinbefore alleged and otherwise, to attempt to secure to the defendant exclusively, the said southwest 135.5 feet of said Conkling Lode Mining Claim, as described in said patent and herein, without informing your orator, or its predecessors in interest, as tenants-in-common in said Conkling Lode Mining Claim as hereinbefore alleged, of any of its aforesaid secret acts, doings or intentions, thereby leaving your orator, at this late date, entirely helpless in the premises to meet the contentions now made by said defendant in reference to the boundaries of said Conkling Lode Mining Claim being other than as described in said patent and herein.

XIX.

And your orator further shows and alleges that the said defendant's duty, as tenant-in-common with your orator and its said predecessors in interest in said Conkling Mining claim, was and is to protect the entire extent and area of said claim, as described in the patent thereof, and secure, if possible so to do, the entire area thereof, as described in said patent, and not to destroy or defeat the same in

any manner or to any extent whatsoever, nor acquire or attempt to acquire any adverse interests in and to the ground as bounded and described in said patent and herein, or in or to the minerals therein contained within planes bounded by the boundaries of said Conkling and Arthur Lode Mining Claims, as described in said patent and herein, extended downward vertically.

That neither the Government of the United States nor any third party, or party not interested in said Conkling Lode Mining Claim as patented and described in the patent, does now dispute or contest, or ever has disputed or contested, to the best of your orator's knowledge, information and belief, the exterior boundaries of said Conkling Lode Mining Claim as described in the patent and in this Amended Bill of Complaint herein.

In Consideration Whereof and forasmuch as your orator has no sufficient remedy at law for the wrongs done and threatened to be done, and that the remedy at law is inadequate and can afford no protection to your orator against the unlawful and wrongful claims and assertions of said defendant, and the waste done and threatened to be done for the reasons hereinbefore stated, and is only relievable in a court of equity where matters of this kind are properly cognizable and reviewable.

23

Your orator to the end that it may obtain the relief to which it is justly entitled in the premises, Prays:

First: That the defendant show, if it can, why your orator should not have the relief prayed, and make full disclosure and discovery of all the matters aforesaid, and, according to the best and utmost of its remembrance, knowledge, information and belief, full, true, direct and perfect answer make to the matters hereinbefore stated and charged, but not under oath, answer under oath being expressly waived.

Second: That the defendant be required to set forth any and every adverse interest, claim or demand in and to the said above described premises as herein specifically bounded and described, and to the ores and minerals therein contained, to the end that the same may be justly adjudicated and declared null and void as against your orator, except only as to an undivided one-fourth ($\frac{1}{4}$) interest therein as tenant-in-common with your orator; and that the title and ownership of your orator to an undivided three-fourths ($\frac{3}{4}$) interest in said Conkling and Arthur Lode Mining Claims, as specifically hereinbefore described, and to the ores and minerals contained therein vertically beneath the surface boundaries thereof as hereinbefore described, be established and confirmed as against any and all claims of the said defendant, and all cloud thereon forever removed:

Third: That an accounting be taken by and under the direction and decree of this Honorable Court, and the amount, quality and value of the ores and minerals removed by said defendant company from said premises described as aforesaid be ascertained and determined; and that, upon such accounting being had and the value of such ores ascertained and determined, your orator may be decreed to

be the owner of three-fourths ($\frac{3}{4}$) of the sum so ascertained, and that the said defendant company be required to pay the same to your orator.

Fourth: That your honors grant unto your orator your writ of Injunction, commanding the said defendant, its servants, agents and employees, and all persons under its authority, direction or control, until the final determination of this action, to absolutely desist and refrain from entering into or upon any portion of said Conkling and Arthur Lode Mining Claims as hereinbefore described, or either of them, and from working in or upon said premises or beneath the surface thereof, or taking any ores or minerals therefrom at any point upon or beneath the surface of said premises herein described

24 extended down vertically; or, that your Honors in lieu of an injunction as prayed for appoint a receiver pending the final determination of this action, and that such receiver be empowered and authorized to enter into the joint or common possession of said Conkling and Arthur Lode Mining Claims, as they are bounded and described in this Amended Bill of Complaint, with the defendant company, and said receiver and said defendant company continue the further mining and disposing of the ores now developed and that may hereafter be found and developed lying underneath the surface of said Conkling and Arthur Lode Mining Claims, and confined between the vertical planes drawn down through the exterior boundaries of said mining claims as hereinbefore described under such suitable provisions as your Honors may deem best.

Fifth. That the said defendant be adjudged and decreed to have purchased and to hold the said Custer No. 2 and Silver Hill No. 4 Mining Claims in trust for your orator and said defendant as tenants-in-common in said Conkling and Arthur Lode Mining Claims, according to their respective shares, viz: an undivided three-fourths ($\frac{3}{4}$) interest for your orator and an undivided one-fourth ($\frac{1}{4}$) interest for said defendant.

And For Such Other And Further Relief as the equity of the case may require, and as to your Honors may seem meet, and for its costs of suit in this behalf wrongfully expended.

CHARLES C. DEY &
A. C. HOPPAUGH,
Solicitors for [Complain.]

UNITED STATES OF AMERICA,
District of Utah,
County of Salt Lake, ss:

J. Leonard Burch, being duly sworn, deposes and says: That he is an officer of the complainant herein, Conkling Mining Company, to-wit: the treasurer thereof; that he has read the above and foregoing amended bill of complaint, and knows the contents thereof; that the same is true of his own knowledge, except as to matters therein stated on information and belief, and as to those matters he believes it to be true.

(Signed)

J. LEONARD BURCH.

25 Subscribed and sworn to before me this 29th day of June,

A. D. 1909.

[SEAL.]

(Signed)

G. W. PARKS,
Notary Public.

My commission expires Jan'y 4, 1910.

Amended bill, filed July 5, 1909.

(Sgd.)

JERROLD R. LETCHER,
Clerk.

(Replication to Amended Answer.)

This replicant, Conkling Mining Company, saving and reserving to itself all and all manner of advantages of exception which may be had and taken to the manifold errors, uncertainties and insufficiencies of the answer of the defendant Silver King Coalition Mines Company, for replication thereunto says that it does and will aver, maintain, and prove its said bill to be true, certain and sufficient in the law to be answered unto by the said defendant, and that the answer of the said defendant is very uncertain, evasive, and insufficient in law to be replied unto by this replicant; without that, that any other matter or thing in the said answer contained, material or effectual in the law to be replied unto, and not herein and hereby well and sufficiently replied unto, confessed, or avoided, traversed or denied, is true; all which matters and things this replicant is ready to aver, maintain and prove as this honorable Court shall direct and humbly prays as in and by its said bill it has already prayed.

CHARLES C. DAY,
A. L. HOPPAUGH,
Solicitors for Complainant.

Received copy of above replication this 2nd day of September, 1909.

DICKSON, ELLIS, ELLIS &
SCHULDER,
Solicitors for Defendant.

Filed Sept. 2, 1909.

JERROLD R. LETCHER,
Clerk.

(Stipulation In re Certain Pleadings.)

It is hereby stipulated and agreed by and between William H. King, attorney for complainant herein, and Dickson, Ellis, Ellis & Schulder, attorneys for defendant herein, that the said defendant may file in said cause, the annexed amended answer; that the reply of the complainant to the answer now on file, shall be treated and considered as the reply to said amended answer, and that the verification of said reply, as originally filed, shall be

treated and considered as the verification of the reply to said amended answer.

WILLIAM H. KING,
Attorney for Complainant.
DICKSON, ELLIS, ELLIS &
SCHULDER,
Attorneys for Defendant.

Dated this — day of December, 1911.

Filed Dec. 16, 1911.

JEROLD R. LETCHER,
Clerk.

(Order, December 16, 1911, Granting Leave to File Amended Answer, etc.)

At this day, on motion of W. H. Dickson, solicitor for defendant, and pursuant to the stipulation filed herein, it is ordered that defendant have leave to file an amended answer herein and that the reply of the complainant to the answer now on file be treated and considered as a reply to said amended answer, and that the verification to said reply be treated and considered as the verification of the reply to said amended answer.

(Amended Answer to Amended Bill of Complaint.)

Comes now the defendant above named, Silver King Coalition Mines Company, and by leave of the court first had and obtained, files this its amended answer to the amended Bill of complaint of complainant above named:

This defendant, now and at all times hereafter, saving to itself all and all manner of benefit of exception or otherwise that can or may be had or taken to the many errors, uncertainties and imperfections in the said amended bill contained, for answer thereto or to so much thereof as this defendant is advised it is material or necessary for it to make answer to, answering says:

This defendant admits that on or about the 17th day of September, A. D. 1908, Nicholas Treweek and J. Leonard Burch, the original complainants herein, caused the complainant to be incorporated under the laws of the State of Utah, and did thereupon convey to said complainant corporation all of their right, title and interest in and to the Conklings Lode Mining Claim, patented as U. S. Lot No. 689, and the Arthur Lode Mining Claim, patented as U. S. Lot No. 690, situated in the Uintah Mining District, County of Summit, State of Utah, and did also assign and transfer to said complainant corporation all manner of actions, causes of action, suits, demands, controversy and accounting of every kind and nature whatever in favor of said Treweek and Burch and against the defendant herein, but as to whether or not the capital stock of said

complainant corporation was paid for upon the incorporation of said company by the conveyance of said above named mining claim, or any interests therein, and by the assignment mentioned in said complaint, this defendant has no knowledge or information thereof, and leaves said complainant to make such proof thereof as it may be advised.

This defendant admits that it is a corporation, organized and incorporated under the laws of the State of Nevada, on or about the month of May, 1907, but denies that it was so organized for the purpose of taking over the Kearns-Keith Mining Company or the Silver King Mining Company respectively, corporations.

This defendant admits that it succeeded to the interest theretofore owned by said Kearns-Keith Mining Company in and to the Arthur and Conkling Lode Mining Claims, and that such interest was an undivided one-fourth interest therein.

Admits that on the 22nd day of September, 1903, the said Kearns-Keith Mining Company was the owner of said undivided one-fourth interest in and to said Conkling and Arthur Lode Mining Claims and from thence continued to be the owner thereof until said Kearns-Keith Mining Company conveyed and transferred said interest to the defendant above named, which said conveyance or transfer was made on, to-wit: the 31st day of May A. D. 1907, and not on the 29th day of May, 1907.

That as to whether or not one Nicholas Treweek was the owner of an undivided one-half interest in and to each of said Conkling and Arthur Lode Mining Claims, during all or any of the times that said Kearns-Keith Mining Company was the owner of an undivided one-fourth interest therein, this defendant has no knowledge or information thereof, and leaves said complainant to make such proof thereof as it may be so advised; and as to whether the said

28 Treweek, upon the transfer by said Kearns-Keith Mining Company to the defendant herein was the owner of an undivided one-half interest in said mining claims and each of them, and from thence continued to be the owner of such interest in common until the transfer by him to the complainant herein, this defendant has no knowledge or information thereof, and leaves said complainant to make such proof as it may be advised.

That as to whether or not the said J. Leonard Burch was the owner, on or about the 16th day of May, 1906, or ever was, at any other time, the owner of an undivided one-fourth interest in and to said Conkling and Arthur Lode Mining Claims, and that from thence as such owner he became or was the tenant in common with said Kearns-Keith Mining Company in said mining claims, or either of them, until the transfer by said Kearns-Keith Mining Company of its interest in and to said claims to the defendant herein, and that since the time of said transfer he ever was a tenant in common with the defendant herein to said claims, or either of them, until he transferred his interest to the complainant herein, this defendant has no knowledge or information thereof, and therefore leaves said complainant to make such proof thereof as it may be advised.

This defendant admits that on or about the 23rd day of February,

1892, the United States of America, by its letters patent, granted unto the Boss Mining Company, a corporation, those certain premises called the Conkling and Arthur Lode Mining Claims respectively, situated in the Uintah Mining District, County of Summit, State of Utah, and that in said patent said Conkling Lode Mining Claim was particularly bounded and described as in the 5th paragraph of said amended bill of complaint set forth, and that in and by the terms of said patent the said Arthur Lode Mining Claim is particularly bounded and described as set forth in said 5th paragraph of said amended complaint, but this defendant alleges that the description and boundaries of said claims as set forth in said fifth paragraph of said amended bill of complaint, are not a true or correct description of either of said mining claims as the same are bounded and described and limited upon the ground by the permanent monuments, objects and bearing-trees found upon the ground, and alleges that the said Conkling Lode Mining Claim, U. S. Lot No. 689, and the Arthur Lode Mining Claim, U. S. Lot No. 690, as the same are actually found upon the ground, are particularly described and bounded as follows, to-wit:

29 Commencing at corner No. 2, the northeast corner of the Conkling Claim and the northwest corner of the Arthur Claim, a common corner of said Conkling and Arthur Claims, from which U. S. Mineral Monument No. 4 bears North 32 deg. 52 min. West 939.3 feet distant, thence from said corner south 61 deg. 21 min. West 1364.5 feet to corner No. 3, the northwest corner of said Conkling Claim, thence south 21 deg. 09 min. East 600 feet to corner No. 4, the southwest corner of said Conkling Claim, thence North 61 deg. 21 min. East 1364.5 feet to corner No. 1, the southeast corner of said Conkling Claim, and also corner No. 1 and the southwest corner of said Arthur claim, and thence north 76 deg. 57 min. East 951.8 feet to corner No. 4, the southeast corner of the Arthur Claim, thence North 21 deg. 09 min. West 600 feet to corner No. 3, the northeast corner of said Arthur Claim, and thence South 76 deg. 57 min. West 951 feet to said corner No. 2, the northwest corner of said Arthur Claim and the place of commencement of surface bounds. The line of division between said mining claims runs North 21 deg. and 9 min. West from said common corner No. 1 to said common corner No. 2.

This defendant admits that beneath the surface and within the exterior boundaries, extended downward vertically, of each of said mining claims, there is a lode or vein of rock in place, bearing silver, lead and other valuable minerals, which, on its course or strike, extends throughout the length of said claims; and admits that said mining claims and each of them are valuable only for the ores and minerals therein contained, but this defendant alleges that no part or portion of the top or apex of the said lode or vein of rock in place, found beneath the surface of the said mining claims, as above admitted, is found anywhere within the exterior boundaries, extended downward vertically, of said claims, or either of them, but that the top or apex of said lode or vein, and the whole thereof, is found and contained within the surface boundaries, extended down-

ward vertically, of certain other mining claims, owned and possessed by this defendant, as hereinafter in this answer more particularly alleged and described, which said other claims lie northerly from said Conkling and said Arthur Mining claims.

This defendant denies that ever since the incorporation of this defendant, it has been, or still is, or ever was, in the possession of the vein or lode described in the amended complaint herein, as within or beneath the boundaries of either the said Conkling or Arthur Lode Mining Claims, or all or any of the ores or minerals therein except as hereinafter alleged; and denies that it is.

30 or has been, since the incorporation of said defendant, working or developing any vein or lode within the boundaries of said Conkling and Arthur Lode Mining Claims, extended downward vertically, or is, or ever has been, extracting any ores or minerals therefrom, except that from the vein or lode so apexing as aforesaid in other mining claims owned by this defendant it extracted from beneath the surface of the said Conkling Lode Mining Claim not to exceed 990 tons of ore, of all grades or classes. And this defendant alleges that the value of all the ore hitherto mined by this defendant from within the surface boundaries, extended downward vertically, of the said Conkling Mining Claim, after deducting therefrom the reasonable and necessary cost and expense of mining and disposing of said ores, does not exceed the sum of 20,047.50. And this defendant further alleges that the reasonable and necessary cost and expense incurred by it in the discovery and development of all ores hitherto mined or removed by it from within the exterior boundaries, extended downward vertically, or the said Conkling mining Claim, exceeds the sum of 72,500. And this defendant further alleges that it has not, at any time hitherto, mined or extracted any ores whatever from within the exterior boundaries, extended downward vertically, of the said Arthur Lode Mining Claim. And this defendant denies that the said Kearns-Keith Mining Company, ever, at any time, was in possession of said vein or lode, or all or any of the ores or minerals therein, within or beneath the surface of either the said Conkling or the Arthur Lode Mining Claims, and denies that it ever was working or developing the same, or extracting any ores or minerals therefrom whatever.

This defendant admits that it and said Kearns Keith Mining Company gained access to said mining claims, beneath the surface thereof, and within the exterior boundaries thereof extended downward vertically, by means of certain underground works situated upon other property, then and now owned by this defendant and its predecessors in interest; but this defendant denies that said complainant is, or that it has been, or that any of its predecessors in interest have been excluded by this defendant from access to any of the workings of this defendant, on or beneath the surface of either the said Conkling or the said Arthur Mining Claims. And this defendant denies that it has, since its incorporation, or that said Kearns Keith Mining Company, grantor of said defendant, has extracted large or any quantities of ore from said Conkling or

31 said Arthur Lode Mining Claims, except as hereinbefore admitted; and denies that the ores so extracted by said defendant from beneath the surface of said Conkling Mining Claim, as hereinbefore admitted, exceed the sum of one million dollars, or any other sum whatever, except \$20,047.50; and this defendant alleges, as it has hereinbefore alleged, that the reasonable and necessary cost and expense incurred by it in the discovery and development of all said ores, so heretofore mined by it from within the exterior boundaries extended downward vertically, of the said Conkling Claim, exceeds the sum of \$72,500. And this defendant denies that the grantors of said complainant, prior to the commencement of this action, did demand from said defendant, that it account to them, tenants in common, with it of said mining claims, of the ores and minerals by it and its grantors removed from said premises and disposed of, or for their just and proper share or value thereof; but admits that said complainant and its predecessors did demand that said defendant account to them for ores and minerals taken and removed by said defendant from property and premises in which neither said complainant nor any of its predecessors in interest ever, at any time, had any estate, right, title or interest whatever. And this defendant admits that after the incorporation of said complainant and after it succeeded to the rights and interests of said Nicholas Treweek and J. Leonard Burch in and to the said Conkling and Arthur Mining Claims, it did, on or about the 30th day of November, 1907, demand an accounting by this defendant for the value of the ores mined by it from beneath the surface of the said Conkling Mining Claim.

Admits that said defendant company has entirely ignored said demand and refused and neglected to make answer thereto, and refused to account to said complainant for the value of the ores by it mined or removed from beneath the surface of said Conkling Lode Mining Claim, and this defendant alleges that it was not, at said time, and never has been, obligated to account to said complainant, or any of its predecessors in interest for any ores mined or extracted by it from beneath the surface of the said Conkling Lode Mining Claim, or any other mining claim then owned, held or possessed by said complainant, or any of its predecessors in interest.

This defendant admits that it asserts, pretends and claims an exclusive interest, not as tenant in common with the complainant herein, in and to the southwest 135.5 feet of the premises attempted to be described in said amended complaint as a part and portion of the said Conkling Lode Mining Claim, adverse to said complainant, and admits that it claims and asserts that it has
32 the exclusive right and ownership of all the ores contained therein, within planes extended downward vertically from the lines described in the tenth paragraph of said amended bill of complaint, and admits that said defendant has given out in speech and otherwise that it has the exclusive right to enter in and upon said premises and remove therefrom, without accounting to said [complain-t] as a tenant in common with it, as aforesaid, or otherwise, because of its ownership of the said premises in which said ores

and minerals are contained; and admits that it asserts that the boundaries of the said Conkling Mining Claim, as described in said amended complaint herein, are not the proper boundaries thereof, to the extent of including the said 135.5 feet, alleged by said complainant to be embraced within the boundaries of said Conkling Mining Claim; but this defendant denies that any part or portion of said 135.5 feet, so owned by this defendant as aforesaid, belongs to or is embraced within the said Conkling Lode Mining Claim, and denies that the Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, mentioned in said tenth paragraph of said complaint, so far as said 135.5 feet are concerned, overlap or conflict at all with said Conkling Lode Mining Claim, and this defendant denies that its claims and pretensions as to the ownership of said 135.5 feet are false or untrue or unfounded in fact; and denies that by reason of any of the facts alleged in said amended bill of complaint, said defendant ought not to be permitted to vary the location or boundaries of the said Conkling Lode Mining Claim upon the ground, as the same are described in said amended bill of complaint, or to assert an interest adverse to said complainant in and to said 135.5 feet; and denies that said defendant should be held as trustee of the title of any part or portion of said Custer No. 2 or the Silver Hill No. 4 Lode Mining Claims, for the benefit of said complainant, as a tenant in common with said defendant, or otherwise, or at all.

This defendant denies that the description of the location of said Conkling Mining Claim, as described in said amended bill, is the same or identical description, as described in the patent and as patented, and on the contrary this defendant alleges that the true description of said Conkling Lode Mining Claim, is as appears from the patent and the field notes, which are a part thereof, and the return of the surveyor making the said survey of the said Conkling Lode Mining Claim; that a true and correct description of said Conkling Lode Mining Claim is as hereinbefore in this answer set

33 forth; and this defendant denies that in and by the description contained in said amended bill of complaint, the location of the boundaries of said Conkling Lode Mining Claim can be readily or at all traced, ascertained or determined upon the ground, and denies that said or any alleged tracing, from the description set forth in said amended complaint of said Conkling Lode Mining Claim, at all or any of the times mentioned in said amended bill of complaint, was well or at all known to said Kearns Keith Mining Company, or to this defendant, or to any other person or persons whomsoever, and this defendant admits that ever since said Conkling Mining Claim was patented, the owners of said claim have never had any disputes or contention over, or disturbance of their ownership or right of possession of said Conkling Lode Mining Claim, as the same is located upon the ground; but denies that the said Conkling Lode Mining Claim is or can be located upon the ground as the same is described in said amended complaint herein, and alleges that said Conkling Lode Mining Claim, as the same exists upon the ground, as determined by the monuments, permanent ob-

jects and bearing-trees called for in the filed notes of the survey of said claim, embraces the premises and none [others], as the same are described hereinbefore in this answer, and do not include any part or portion of said 135.5 feet, claimed by the complaint herein, and that the said premises as described herein, exclusive of said 135.5 feet, are the premises had and held by this defendant and its predecessors in interest and the other owners of said claim, as tenants in common with this defendant and its predecessors in interest, without dispute or contention, and that no contention as to the locus of said Conkling Lode Mining Claim was ever at any time made or communicated to this defendant, or any of its predecessors in interest, until the filing of the complaint in this action and the alleged description thereof, as set forth in said complaint, and denies that this defendant has been guilty of any wrongful acts or conduct whatever, or that its grantor and predecessor in interest, Kearns Keith Mining Company, has been guilty of any wrongful act or conduct whatever. And this defendant denies that it or its predecessor in interest, the Kerns Keith Mining Company, or any other person whomsoever, at any time whatever, either before or after the 22nd day of September, 1903, extended secretly the Alliance Tunnel, or any other workings through or underneath the Conkling Lode Mining Claim, as alleged in said complaint or otherwise, or that they, or either of them, secretly drove any cross-cut or other

34 working from said Alliance Tunnel, or otherwise, to or near the southwest corner of said Conkling Lode Mining Claim, as the same is described in said patent, or in said amended complaint.

This defendant admits that the openings underneath the surface and within the boundary planes of the Conkling Lode Mining Claim, extended downward vertically, can be entered through the main shaft of the Silver King Mining Company, and from the levels and drifts therefrom, or through said Alliance Tunnel, and that said shaft, drifts, levels and said Alliance Tunnel are under the exclusive control and ownership of the defendant, and were under the exclusive ownership and control of the said Silver King Mining Company, with the reserved right in said Thomas Kearns, as alleged in said amended complaint, until the incorporation of the Kearns Keith Mining Company. And this defendant denies that in drifting and extending the cross-cut from said Alliance Tunnel, and prior to the conveyance by said Kearns Keith Mining Company, the said Kearns Keith Mining Company secretly discovered or explored a large or any valuable ore deposit. And denies that this defendant, or its said grantor, have made extensive or any stoping, or secretly removed from any part or portion of said Conkling Lode Mining Claim ore of the value of \$1,000,000, or any other sum, except the sum of \$20,047.50, as hereinbefore in this answer alleged. And this defendant denies that the description of the said Conkling Lode Mining Claim, as asserted and claimed by this defendant herein, is such that it is within the boundary planes of the said Conkling Lode Mining Claim, as alleged to be described in the patent thereof, extended downward vertically, and denies that the 135.5 feet, claimed by said

complainant in said amended bill of complaint to be part and parcel of said Conkling Lode Mining Claim is any part or portion thereof, or belongs thereto, or that said complainant, or any of its predecessors in interest, have any estate, right, title or interest in or to any part or portion of said 135.5 feet, or in or to any part or portion of the ores or minerals therein contained, vertically beneath the surface thereof. And this defendant denies that the value of the ores found or discovered within the planes extended downward vertically of said [135.5] foot strip is not less than the sum of \$2,500.00, or of any greater value than the sum of \$52,681.00. And this defendant denies that all or any of the underground work or discovery of ore, or removal of ore, by it, was intentionally or wrongfully or at all kept secret by this defendant, or its predecessors in interest from said complainant, or any of its predecessors in interest, Nicholas Treweek or J. Leonard Burch, or any other person. And this defend-

35 ant alleges that as to what suspicions the predecessors in interest of said complainant had, this defendant has no knowledge or information thereof, and leaves said complainant to make proof as it may be advised. And this defendant denies that it refused permission to said predecessors in interest of said complainant to inspect the underground workings beneath the surface of the said Conkling and Arthur Mining Claims, and this defendant admits that on or about the month of December, 1907, the said Nicholas Treweek and J. Leonard Burch demanded of this defendant an accounting for the proceeds of any or all ores taken from said Conkling and Arthur Lode Mining Claims, but this defendant denies that this defendant expressed great or any surprise at any demand which said Treweek or said Burch might make upon it for ores mined by it from its property, and admits that it informed the said Treweek and Burch that it had spent a great deal of money in exploration and claimed the right to remove and extract sufficient ore to repay it for the money expended in such explorations before said Nicholas Treweek and said J. Leonard Burch, or either of them, would be entitled to have or receive, as tenants in common with said defendant, any accounting whatever from said defendant.

This defendant denies that the said Kearns Keith Mining Company at any time after the discovery of ore, as alleged in the thirteenth paragraph of said amended bill of complaint, or otherwise, or at all, made or caused to be made cunning or any efforts to purchase the interests in said mining claims owned by said Treweek and said Burch, or either of them, or that said Kearns Keith Mining Company, or any one on its behalf, represented that said interests were of no special value, or that they offered to pay for said interests in the sum of \$15,000 and no more; but this defendant alleges that it is a fact that the interest of said Treweek and said Burch at said time, and of said complainant, in and to said Conkling and Arthur Lode Mining Claims, was at said time, and is now of no great value, for the reason that there has been discovered in and beneath the surface of said mining claims no ores of any special or great value, and that the ores which have been discovered therein belong to and are part and parcel of a vein or lode having its apex in mining ground and

premises owned, held and possessed by this defendant, since its incorporation, and prior thereto, by its predecessors in interest, as hereinafter particularly set forth and alleged, and as to when the said Treweek and the said Burch first had any suspicion, as alleged in the 13th paragraph of said complaint, this defendant has no knowledge or information, and therefore leaves the said complainant to make such proof thereof as it may be advised.

36 This defendant, answering paragraph numbered 14 of said amended bill of complaint, denies that after any failure whatever, at any time whatever, to purchase any interest of said Treweek and Burch, or either of them, in said Conkling and Arthur Lode Mining Claims, as alleged in said amended bill of complaint, or otherwise, or at all, the said Kearns Keith Mining Company did, during the month of April, 1907, or at any other time, or at all, purchase from the Belmont Mining Company, a corporation, for the consideration named in said amended complaint, or any other consideration whatever, the Custer No. 2 and the Silver Hill No. 4 Lode Mining Claims, or either of them, then owned by said Belmont Mining Company, or took a conveyance or the same, or either of them, in the name of Thomas Kearns, trustee, or any other person whomsoever, and denies that upon the incorporation of this defendant, the said Thomas Kearns, as trustee, wrongfully conveyed the said mining claims, or either of them, exclusively to the defendant herein, and to the contrary this defendant alleges that on or about, to-wit: the 6th day of April, 1907, the said Thomas Kearns, individually, and for and on his own behalf, took and received an assignment of an option theretofore given and granted by the Belmont Mining Company to one D. P. Rohlfing, to purchase the said Custer No. 2 and the said Silver Hill No. 4 Lode Mining Claims; that thereafter and on or about the 10th day of April, 1907, the said Thomas Kearns did offer to the Silver King Mining Company, a corporation, to assign and transfer to it the said option to purchase, so as aforesaid assigned to him, and on, to-wit: the said 10th day of April, 1907, the said Silver King Mining Company did duly accept the offer of the said Thomas Kearns, and did thereupon pay to the said Belmont Mining Company, the portion of the consideration to be paid to it, pursuant to the terms of said option, and did thereupon direct that the deed from said Belmont Mining Company should be taken in the name of said Thomas Kearns, as trustee for said Silver King Mining Company, to be conveyed by him to the nominee of said Silver King Mining Company; that on to-wit: the 12th day of April, 1907, the said Belmont Mining Company did execute a deed of conveyance to said Custer No. 2 and Silver Hill No. 4 Lode Mining Claim, conveying the said claims and each of them unto the said Thomas Kearns, trustee, and that thereafter and upon the incorporation and organization of this defendant, and on, to-wit: the — day of June, 1907, at the request and pursuant to the agreement entered into by and between the said Thomas Kearns and the said Silver King Mining Company, the said

37 Thomas Kearns did convey the said Custer No. 2 and the said Silver Hill No. 4 Lode Mining Claims to this defendant,

and that on said day this defendant did complete the purchase of said mining claims and each of them, by paying the balance of the purchase price then due thereon to the said Belmont Mining Company; that at no time whatever did said Kearns Keith Mining Company acquire, have, hold or possess any estate, right, title or interest, of, in or to the said Custer No. 2 and the said Silver Hill No. 4 Lode Mining Claims, or either of them, or in or to any part or portion of either of them; that no part of the purchase price of said mining claims, or either of them, was paid or discharged by said Kearns Keith Mining Company, or any one on its behalf, but that the title to said mining claims was purchased and paid for by said Silver King Mining Company and this defendant, as aforesaid, for the sole use and benefit of said Silver King Mining Company and this defendant, and not otherwise; and this defendant admits that the said Custer No. 2 and said Silver Hill No. 4 Lode Mining Claims were by letters patent of the United States, dated June 2nd, 1904, granted to the Belmont Mining Company, and admits that said patent was based upon location notices antedating the location of said Conkling Lode Mining claim; and this defendant denies that the said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims overlap or include any part or portion of the area of the said Conkling Lode Mining Claim, included within the said 135.5 foot strip thereof, as set forth and described in said amended complaint, and wrongfully claimed by said complainant to be part and parcel of the said Conkling Lode Mining Claim; and denies that any part or portion of said 135.5 foot strip is embraced within or described or forms any part or portion of the said Conkling Lode Mining Claim.

This defendant denies that at all or any of the times mentioned in said amended bill of complaint, or while the said Treweek and Burch and the said Kearns Keith Mining Company were tenants in common in said Arthur and Conkling Lode Mining Claims, that either the said Kearns Keith Mining Company, or the said Treweek or Burch were, as tenants in common, as alleged in said amended bill of complaint, or otherwise, or at all, in the actual, constructive or any possession whatever of any part or portion of the said 135.5 foot strip of the said Conkling Lode Mining Claim, as set forth and alleged in said amended bill of complaint, or otherwise and denies that the purchase by the said Thomas Kearns and this

defendant and said Silver King Mining Company, as hereinbefore alleged, of said Custer No. 2 and said Silver Hill

38 No. 4 Lode Mining Claims, or either of them, from said Belmont Mining Company, was at all made while said Kearns Keith Mining Company, or said Treweek or said Burch, as tenants in common of said Arthur and Conkling Lode Mining Claims, or either of them, were in the possession of any part or portion of the said 135.5 foot strip, mentioned in said amended complaint, or otherwise, and denies, as it has heretofore denied, that said Kearns Keith Mining Company and said Treweek and said Burch were tenants in common of any part or portion of said 135.5 foot strip, or that any part or portion of said 135.5 foot strip ever was, at any time, part or parcel of the said Conkling Lode Mining Claim; and this

defendant denies that at the time of the purchase by said Thomas Kearns, Trustee, of said Custer No. 2 and said Silver Hill No. 4 Lode Mining Claims, that any ore bodies whatever had been found or discovered within any part or portion of said 135.5 foot strip, and alleges that no ore was developed or found within said 135.5 foot strip until long after the purchase of said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, and the conveyance thereof to this defendant, as hereinbefore alleged, and denies, as it has hereinbefore denied, that said Kearns Keith Mining Company and said Treweek and said Burch ever were, at any time whatever, tenants in common, the one with the other, in or to any part or portion of said 135.5 foot strip, or in or to any of the ores or ore bodies therein contained, and this defendant denies, as it has hereinbefore denied, that said Kearns Keith Mining Company, ever, at any time whatever, purchased said Custer No. 2 or said Silver Hill No. 4 Lode Mining Claim, and admits that neither this defendant, nor any of its grantors, held or claimed any right or interest in or to any part or portion of said 135.5 foot strip until the purchase and conveyance to this defendant of the same, as part and parcel of said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, as hereinbefore alleged; but this defendant denies that this defendant and its grantors and predecessors in interest did not have any right, title or ownership in or to the lodes or veins in said Conklings Lode Mining Claim, as hereinbefore in this answer described, and in and to the ores and veins in said 135.5 foot strip aforesaid, part and parcel of said Custer No. 2 and said Silver Hill No. 4 Lode Mining Claim; and on the contrary this defendant alleges that it and its predecessors in interest, at all times alleged and claimed that it and its predecessors in interest were the owners of and entitled to all the ore bodies, veins and

lodes in and beneath the surface of the said Conklings Lode Mining Claim and the said Arthur Lode Mining Claim and said 135.5 foot strip, by reason of its and its predecessors in interest, ownership of the apex of the veins or lodes in which such ore bodies are found, as hereinafter in this answer specifically set forth and alleged. And this defendant denies that either it, or any of its predecessors in interest, have been, at any time whatever, or now is, a tenant in common with said plaintiff or any of its predecessors in interest of, in or to any part or portion of said 135.5 foot strip, or any of the ores found or contained therein. And this defendant admits that said Kearns-Keith Mining Company never made any independent claim, or any claim whatever, to any part or portion of said 135.5 foot strip, or any of the ores or minerals therein contained; but this defendant denies that it and its predecessors in interest made no independent or other claim adverse to said complainant, or any of its predecessors in interest, in or to said 135.5 foot strip, or any part thereof, until the 11th day of April, 1908, and on the contrary this defendant alleges that it and its predecessors in interest have at all times since procuring the title to said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, as aforesaid, claimed and asserted title adverse to all the world, in and to said 135.5 foot strip and to all the ores and minerals, veins and lodes

therein contained. And this defendant denies that it has made any secret extension whatever of the said Alliance Tunnel, as set forth in said amended bill of complaint, or otherwise, and denies that it, or any of its grantors or predecessors in interest, carried on any work in said Alliance Tunnel, or otherwise, as tenants in common with said complainant, or any of its predecessors in title or interest, or for the discovery or development of any ore within the exterior boundaries, extended downward vertically, of said Conkling Mining Claim, or claimed of or from its co-tenants any payment or reimbursement whatever out of any ores developed in said Conkling Mining Claim, for the cost or expense incurred in said work; and this defendant denies that while carrying on any work whatever, as tenant in common with said complainant, or any of its predecessors in interest, or while claiming to be carrying on any work whatever for the development of any properties held or claimed in common by them, or either of them, or while claiming any reimbursement whatever by reason of such co-tenancy, or otherwise, or at all, out of any ores within said Conkling Mining Claim, for the cost or expense of extending said tunnel, or otherwise said defendant's grantor, Kearns Keith Mining Company, or any other person

40 son or corporation whatever, secretly or at all discovered any ore body whatever within said 135.5 foot strip, or fraudulently or otherwise, contriving to deprive any of its co-tenants of their just or any proportion of the value of any ore, or contriving or intending to secure to this defendant's grantors, the benefit of the whole or any part thereof, the said Kearns-Keith Mining Company secretly, without informing said complainant's predecessors in title of the discovery of any ores, or otherwise, or at all, purchased said Custer No. 2 or said Silver Hill No. 4 Lode Mining Claims, or either of them, or thereafter, or at all, held the same secretly or otherwise, or after developing the said ground and fully ascertaining the extent of said ore bodies, or the value of the ore contained therein, or otherwise, or at all, for the first or any time made known to said complainant's predecessors in title that the said Kearns Keith Mining Company claimed adversely or otherwise, said 135.5 foot strip, or for the first time, or at all, pretended or claimed that said 135.5 foot strip was not within the boundaries or planes of said Conkling Lode Mining Claim. And on the contrary this defendant alleges that at no time whatever did said Kearns-Keith Mining Company have any estate, right, title or interest whatever in or to said 135.5 foot strip, and that no ore whatever was found or developed in said 135.5 foot strip, until long after the purchase and conveyance to this defendant by said Kearns, trustee, of said Custer No. 2 and Silver Hill No. 4 Lode Mining Claim, as hereinbefore alleged. And this defendant denies that said Kearns-Keith Mining Company ever, at any time whatever, secured title to said Custer No. 2 or said Silver Hill No. 4 Mining Claims. And denies that it ever was in possession of any part or portion of the said 135.5 foot strip. And denies that said Kearns-Keith Mining Company ever made any claims whatever to said 135.5 foot strip, or any part thereof, as any part or portion of said Conkling Lode Mining Claim. And denies that said Kearns

Keith Mining Company ever contrived or intended by any adverse claim or assertion whatever, to deprive said complainant, or its predecessors in title, of any ores discovered in or beneath the surface of said 135.5 foot strip; and denies that any ore was discovered in said 135.5 foot strip by said Kearns-Keith Mining Company, or by any other person or corporation than this defendant, as hereinbefore set forth and alleged. And this defendant denies that the claims and assertions of this defendant that the boundaries of said Conkling Lode Mining Claim, as the same are set forth in said amended bill of complaint, and in the patent to said Conkling Lode Mining Claim, without reference to the field notes of the survey of said claim

41 (which form and are a part of said patent) are not its true boundaries, and that the said 135.5 foot strip in said amended complaint mentioned, should not be included in the said Conkling Lode Mining Claim, when located upon the ground, constituted or was the first notice that said Treweek and said Burch, or either of them, ever had that any such claim or assertion existed from any source whatever. And on the contrary this defendant alleges that at all times, both said complainant and said Treweek and said Burch have had full and complete notice that the said 135.5 foot strip was no part or parcel of the said Conkling Lode Mining Claim, as the same was located upon the ground, and never at any time made any claim or contention that the said strip was any part or portion of said Conkling Lode Mining Claim until just prior to the commencement of this suit.

Answering paragraph numbered 15 of said amended bill of complaint, this defendant admits that the said Treweek and Burch did ascertain the actual facts and the whole thereof with respect to the underground works beneath the surface boundaries of the said Conkling Lode Mining Claim, and the character and extent of the ore developed therein, and did ascertain the fact to be that no part or portion of the ores and minerals found and developed in the said 135.5 foot strip belonged to or was beneath any part or portion of the said Conkling Lode Mining Claim, and did ascertain the fact that all of the ores and minerals contained in said 135.5 foot strip, were outside of and beyond the exterior boundaries of said Conkling Lode Mining Claim.

Answering paragraph numbered 16 of said amended bill of complaint, this defendant denies each and every allegation therein contained.

This defendant admits that the said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims were purchased by this defendant without the knowledge, acquiescence or consent of said Treweek or Burch, or either of them, but denies that such purchase was made for the purpose, or with the intention of defrauding said Treweek or Burch, or said complainant in any way whatever, as tenants in common with this defendant, or its grantor, the Kearns-Keith Mining Company, or either said Conkling or said Arthur Lode Mining Claims, or out of their just or proper rights in the premises, or otherwise, or in or to any part or portion of said Conkling Lode Mining Claim, wherein any ores or minerals whatever, of any value whatever, have

42 been found or discovered. And denies that this defendant has made any attempt whatever to describe or locate the said Conkling Lode Mining Claim, so as to exclude said 135.5 foot strip therefrom, or has located or attempted to locate said Conkling Lode Mining Claim otherwise than in accordance with the actual facts, and as said claim appears upon the ground, from the permanent monuments, posts, ties and bearing-trees thereof. And this defendant denies that it has done, or caused to be done any act or thing, with any intention or purpose to defraud said complainant, or any of its grantors or predecessors in interest, in any manner whatever, and this defendant admits that neither this defendant, nor said Kearns-Keith Mining Company ever notified the said Treweek or the said Burch, or said complainant of the purchase by this defendant of said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, or permitted them, or either of them, to participate in such purchase; and denies that either this defendant or any of its grantors or predecessors in interest was under any obligation or duty whatever to notify either the said Burch or said Treweek or said complainant of any sale or purchase whatever of said Custer No. 2 or said Silver Hill No. 4 Lode Mining Claims. That as to whether since the purchase of said Custer No. 2 and said Silver Hill No. 4 Lode Mining Claims by this defendant, as hereinbefore alleged, said complainant, since its incorporation, has been, or prior thereto said Treweek or Burch were, or said complainant now is, ready, able or willing to pay or contribute $\frac{3}{4}$ of the purchase paid by this defendant for said aforesaid mining claims, this defendant has no knowledge or information thereof, and leaves said complainant to make such proof thereof as it may be advised.

This defendant denies that by reason of the purchase by this defendant of said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, said complainant has been, or now is, or either or any of its grantors have been, greatly or wrongfully or at all, prejudiced in any way whatever, as tenants in common of said Conkling Lode Mining Claim, as hereinbefore described, or otherwise, or at all.

Answering paragraph numbered 18 of said amended bill of complaint, this defendant admits that the survey of the Conkling Lode Mining Claim was made in the month of November of the year 1889 by Adolph Jensen, now deceased, then Deputy United States Mineral Surveyor, but that as to whether all other persons connected with the making of said survey of said Conkling Lode Mining Claim, are dead, or their whereabouts unknown, this defendant has
43 no knowledge or information thereof, and therefore leaves said complainant to make such proof thereof as it may be advised.

This defendant admits that said Conkling Lode Mining Claim is situated in a rough country, at a high altitude, and that the surface is covered partly by large trees and brush and undergrowth, and that the yearly snow-fall in the winter thereat is great, but this defendant denies that none of the original marks or boundaries of said Conkling Lode Mining Claim, referred to in said patent, is now standing, and denies that the original place where the respective

corners were marked, is now a matter of speculation merely; and to the contrary thereof this defendant alleges that some of the original posts and monuments, marking the boundaries of said Conkling Lode Mining Claim, are now standing in place in their original position, and that they are the permanent objects referred to in the field notes of said survey of said Conkling Mining Claim, with the proper markings thereon, now standing in their original position, and that certain bearing-trees, identifying and locating the position of the original monuments of said claim, are now standing, properly marked, and have been ever since the said survey was made, as aforesaid, and that the original position upon the ground of said Conkling Lode Mining Claim can be definitely and accurately determined from the permanent objects, monuments, bearing-trees and other references found in the field notes of the survey of said claim and upon the ground where said premises are located; and this defendant denies that it, or any of its predecessors in interest, by any means whatever, have been secretly, or at all, scheming or designing, by any ways or means whatever, or by any methods whatever, except as hereinbefore in this answer set forth and alleged, to secure to this defendant exclusively, or at all, the said 135.5 foot strip of ground hereinbefore mentioned and referred to, and that the only means or method used by this defendant, or any of its predecessors in interest or title, to secure said 135.5 foot strip, was by the purchase by it from said Belmont Mining Company of the said 135.5 foot strip, part and parcel of said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, conveyed to it by said Thomas Kearns, trustee, as aforesaid; and this defendant denies that any part or portion of said 135.5 foot strip belongs to, or is part or parcel of, said Conkling Lode Mining Claim, as described in said patent, or otherwise. And this defendant admits, as it has heretofore admitted, that it purchased the said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, embracing said 135.5 foot strip, without informing said complainant, or any of its predecessors in interest; and this defendant denies, as it has heretofore denied, that either said complainant, or any of its predecessors in interest have been at any time whatever the tenant in common with this defendant, or any of its predecessors in interest, of, in or to any part or portion of said 135.5 foot strip, or any of the ores or minerals, lodes or veins therein contained. And this defendant denies that by reason of any act or thing done or omitted by this defendant, or any of its predecessors in interest, said complainant, or any of its predecessors in interest, at this late date, or any other date, have been left entirely or at all helpless to meet the contentions now made by said defendant in reference to the boundaries of the said Conkling Lode Mining Claim; and on the contrary this defendant alleges that said complainant and its predecessors in interest have at all times been fully able to ascertain and determine the true and correct boundaries of said Conkling Lode Mining Claim, as the same exists upon the ground, and that if said complainant, or any of its predecessors, had gone upon the ground, it or they, at any time since the survey of said Conkling Lode Mining Claim, in the year 1889, as aforesaid, could and would

have ascertained and determined that the correct location of said Conkling Lode Mining Claim, as the same exists upon the ground, is as said claim is described in this answer, and not otherwise. And this defendant denies that it was or is its duty, as tenants in common with said complainant, or its predecessors in interest, or otherwise, to secure the entire area described in the patent for said Conkling Lode Mining Claim, without reference to the field notes and actual facts as they exist upon the ground; and denies that it was or is the duty of said defendant, or any of its predecessors in interest not to acquire, or attempt to acquire, any interest in and to any ground or premises not embraced within the said Conkling Lode Mining Claim, as the same exists upon the ground, or not to acquire, or attempt to acquire, any interest in or to any ground which might or could be embraced within the alleged described boundaries of the Conkling Lode Mining Claim, as set forth in the amended complaint herein; and on the contrary this defendant alleges that it was its duty and that of its predecessors in interest to attempt to ascertain the true and actual boundaries of said Conkling Lode Mining Claim, as the same were and are located upon the ground; and alleges in that behalf that it has performed its full duty and has ascertained and determined that the said Conkling Lode Mining Claim, as the same exists upon the ground, is as set forth and described in this answer, and not otherwise. And this defendant admits that neither the Government of

45 the United States, nor any third parties, or any person or party whomsoever, except the complainant and its predecessors in interest, does now dispute or contest, or ever has disputed or contested the said Conkling Lode Mining Claim, as patented and as the same is described in this answer. And this defendant alleges that the field notes of the survey of the said Conkling Lode Mining Claim are part and parcel of the patent record thereof, and that the said description contained in the said patent is controlled by the field notes of the survey thereof, and by the monuments, posts, permanent objects and bearing-trees found upon the ground; and this defendant alleges that in case of any conflict between the description of the said Conkling Lode Mining Claim, as contained in the patent thereof, and the description thereof as the same is located upon the ground by permanent monuments, objects and other permanent objects, including bearing-trees and ties to other well known mining claims, and reference in the field notes to the surveys of other mining claims in the vicinity, that the description contained in the patent must give way to such field notes, ties, permanent objects, monuments and bearing-trees.

Further answering said bill of complaint, this defendant alleges that it is now, and continuously for more than four years and seven months last past has been, the owner of, in the possession of and entitled to the possession of certain lode mining claims, situated in the Uintah Mining District, Summit County, State of Utah, known as and called the "Pinyon and Pinyon Extension" Lode Mining Claim, Lot No. 42, the "Boss" Lode Mining Claim, Lot No. 126, the "Zephyr" Lode Mining Claim, Lot No. 459, the "Brave Columbia" Lode Mining Claim, Lot No. 14, the "Constitution" Lode Mining

Claim, Lot No. 215, the "Cumberland" Lode Mining Claim, Lot No. 216, and the "Monroe Doctrine" Lode Mining Claim, Lot No. 217.

That the said Pinyon and Pinyon Extension Mining Claim is bounded and described as follows, to-wit:

Beginning at Post No. 1, and running thence on a true course, magnetic variation, 17 deg. 20 min. East, North 57 deg. 29 min. West 200 feet to Post No. 2; thence South 32 deg. 23 min. West 2809.4 feet to Post No. 3; thence South 54 deg. 00 min. East 194.1 feet to Post No. 4; thence North 32 deg. 30 min. East 2821.1 feet to Post No. 1, the place of beginning. From Post No. 1 United States Mineral Monument No. 4 bears south 43 deg. 04 min. West 1393.1 feet distant.

That the said Boss Lode Mining Claim is bounded and described as follows:

46 Beginning at Post No. 1, and running thence on a true course, magnetic variation, 17 deg. 20 min. East, South 13 deg. 45 min. East 207.6 feet to Post No. 2, thence South 61 deg. 24 min. West 1481.1 feet to Post No. 3; thence North 13 deg. 50 min. West 196.7 feet to Post No. 4; thence North 60 deg. 00 min. East 1491.2 feet to Post No. 1, the place of beginning. From Post No. 1 U. S. Mineral Monument No. 4 bears North 59 deg. 18 min. West 404.9 feet distant.

That the said Zephyr Lode Mining Claim is bounded and described as follows:

Beginning at Post No. 1, and running thence on a true course, magnetic variation, 17 deg. 20 min. East, North 67 deg. 41 min. East 567.8 feet to Post No. 2; thence South 48 deg. 23 min. East 79.6 feet to Post No. 3; thence South 60 deg. 34 min. West 543.4 feet to Post No. 4; thence North 46 deg. 01 min. West 92.8 feet to Post No. 1, the place of beginning. From Post No. 1 U. S. Mineral Monument No. 4 bears North 49 deg. 05 min. East 1272.1 feet distant.

That the said Brave Columbia Lode Mining Claim is bounded and described as follows:

Beginning at Post No. 1, and running thence in a true course, magnetic variation, 17 deg. 20 min. East, South 43 deg. 04 min. West 206.9 feet to Post No. 2; thence South 45 deg. 53 min. East 1428.2 feet to Post No. 3; thence North 45 deg. 07 min. East 290 feet to Post No. 4; thence North 45 deg. 32 min. West 1437.1 feet to Post No. 1, the place of beginning. From Post No. 1 U. S. Mineral Monument No. 4 bears North 89 deg. 52 min. East 1810.1 feet distant.

That the said Constitution Lode Mining Claim is bounded and described as follows:

Beginning at Post No. 1, and running thence on a true course, magnetic variation, 17 deg. 20 min. East, South 42 deg. 55 min. West 200.7 feet to Post No. 2; thence South 46 deg. 13 min. East 1420.6 feet to Post No. 3; thence North 44 deg. 38 min. East 291.2 feet to Post No. 4; thence North 46 deg. 15 min. West 1420.6 feet to Post No. 1, the place of beginning. From Post No. 1 U. S. Mineral

Monument No. 4 bears North 87 deg. 05 min. East 2014.8 feet distant.

That the said Cumberland Lode Mining Claim is bounded and described as follows:

Beginning at Post No. 1, and running thence on a true course, magnetic variation, 17 deg. 20 min. East, South 45 deg. 07 min.

West 200 feet to Post No. 2; thence South 46 deg. 09 min.

47 East 1424.3 feet to Post No. 3; thence North 45 deg. 33 min.

East 199.6 feet to Post No. 4; thence North 46 deg. 08 min.

West 1425.8 feet to Post No. 1, the place of beginning. From Post No. 1 U. S. Mineral Monument No. 4 bears North 85 deg. 16 min. East 2216.6 feet distant.

That the said Monroe Doctrine Lode Mining Claim is bounded and described as follows:

Beginning at Post No. 1, and running thence on a true course, magnetic variation 17 deg. 20 min. East, South 45 deg. 25 min.

West 198.5 feet to Post No. 2; thence South 46 deg. 02 min. East 1419.9 feet to Post No. 3; thence North 45 deg. 48 min. East 199.9 feet to Post No. 4; thence North 46 deg. 05 min. West 1421.3 feet to Post No. 1, the place of beginning. From Post No. 1 U. S. Mineral Monument No. 4 bears North 83 deg. 35 min. East 2417.4 feet distant.

That each of said mining claims was long since patented to the predecessors in interest of this defendant by the Government of the United States; that the patent for the said Pinyon and Pinyon Extension Mining Claim bears date October 18, 1873; that the patent for the said Boss Mining Claim bears date October 27, 1881; that the patents for the said Brave Columbia, said Constitution, said Cumberland and said Monroe Doctrine Mining Claims each bears date March 31st, 1883, and that the patent for the said Zephyr Mining Claim bears date June 1st, 1898.

That the said Pinyon and Pinyon Extension Mining Claim crosses the said Boss Mining Claim, and the area in conflict between the two was conveyed by said patent to the said Pinyon and Pinyon Extension Mining Claim.

That in said mining claims, so owned by this defendant, as aforesaid, there is a vein or lode of rock in place, bearing gold, silver, lead and other valuable metals, which, on its course and at its apex, crosses the easterly end line of the said Boss Mining Claim, and thence on its course or strike and at its apex, traverses said claim in a westerly direction for a distance of about 484 feet, where, at its apex and on its course or strike, it crosses the southerly side line of the said Pinyon and Pinyon Extension Mining Claim, and thence on its course or strike and at its apex, traverses the said Pinyon and Pinyon Extension Mining Claim in a westerly direction for a distance of about 334 feet, where, at its apex and on its course it crosses the opposite or northerly side line of the said Pinyon and Pinyon Extension Mining Claim, at which point, at its apex and on its course or strike, it re-enters the said Boss Mining Claim, and thence, at its apex and on its course and strike, traverses said Boss Mining Claim in a westerly direction for a distance of about

48

527 feet, where, at its apex and on its course or strike, it crosses the northerly side line of the said Boss Mining Claim, to-wit, at a point about 125 feet easterly of the northwesterly corner of the said Boss Mining Claim, at which point, at its apex and on its course or strike, it crosses the southerly side line of the said Zephyr Mining Claim, and thence, at its apex and on its course or strike, it traverses in a westerly direction the said Zephyr Mining Claim for a distance of about 57 feet, where it crosses the westerly end line of the said Zephyr Mining Claim, at which point, at its apex and on its course or strike, it crosses the located easterly side line of the said Brave Columbia Mining Claim, and thence on its course westerly and at its apex, passes to and across the westerly located side line of the said Brave Columbia, and thence on its course or strike and at its apex traverses the said Constitution Mining Claim, crossing both of the located side lines thereof, and thence on its course or strike and at its apex traverses the said Cumberland Mining Claim, crossing both of the located side lines thereof, and thence on its course and strike at its apex, it traverses the said Monroe Doctrine Mining Claim, crossing both of the located side lines thereof.

That the location of the said Pinyon and Pinyon Extension Mining Claim, and upon which said patent for said claim was issued, as aforesaid, was made or laid upon a vein which crossed the located side lines thereof, as was also the said Brave Columbia, the said Constitution, the said Cumberland and the said Monroe Doctrine Mining Claims.

That said vein dips in a southerly direction, and in its course downward so far departs from a perpendicular that it passes beyond the legal side lines extended downward vertically of each of said mining claims, so owned by this defendant, as aforesaid, and thence continuing on its dip or course downward, passes into, beneath and beyond the exterior boundaries, extended downward vertically, of the said Conkling Mining Claim, not only as the same is hereinbefore in this answer described, but also as the same is described in said complainant's bill of complaint herein.

That this defendant is the owner, in the possession and entitled to the possession, and it and its predecessors in interest, for
49 more than seven years last past, have been the owners, in the possession and entitled to the possession, throughout its entire depth, of all that portion of said vein between the following planes: first, one drawn through the easterly end line of the said Boss Mining Claim, extended indefinitely in its own direction, and another parallel thereto, drawn through the point where said vein, at its apex and on its course, crosses the northerly side line of said Boss Mining Claim, as aforesaid; and second, between planes, one drawn through the located westerly side line of the said Monroe Doctrine Mining Claim, extended indefinitely in its own direction, and another parallel thereto, drawn through the point where said vein, at its apex and on its course crosses, as aforesaid, the southerly side line of the said Zephyr Mining Claim.

That all of the ores at any time mined or removed by this defendant, or any of its predecessors in interest, from beneath the sur-

face of the said Conkling Mining Claim, lay in and belonged to, and were a part of, the said vein or lode so having its top or apex in the said mining claims of this defendant, as aforesaid, and between planes, one drawn through the easterly end line of the said Boss Mining Claim, extended as aforesaid, and another through the westerly located side line of the said Monroe Doctrine Mining Claim, extended as aforesaid.

Wherefore, this defendant having fully answered, confessed, traversed and avoided or denied, all the matters in the said amended bill of complaint, material to be answered, according to its best knowledge and belief, humbly prays this Honorable Court to enter its decree that this defendant be hence dismissed with its reasonable costs and charges in this behalf most wrongfully sustained, and for such other and further relief in the premises as to this Honorable Court may seem meet and in accordance with equity.

A. C. ELLIS,

A. C. ELLIS, JR.,

RUSSELL G. SCHULDER,

Solicitors for Defendant.

W. H. DICKSON,

Of Counsel.

SILVER KING COALITION MINES
CO.,

[SEAL.]

By F. J. WESTCOTT,

Sec'y.

50 STATE OF UTAH,

County of Salt Lake, ss:

Frank J. Westcott being first duly sworn, upon his oath, deposes and says that he is an officer of the defendant corporation above named, to wit: the secretary thereof; that he has read the above and foregoing amended answer and knows the contents thereof and that the same is true of his own knowledge except as to matters therein stated upon information and belief and as to such matters he believes it to be true.

FRANK J. WESTCOTT.

Subscribed and sworn to before me this 14th day of December, 1911.

[SEAL.]

ALLIE LEVY,

Notary Public.

My commission expires May 27-1913.

Copy of the above and foregoing amended answer received and due service admitted this 14 day of December, 1911.

WILLIAM H. KING,

Solicitors for Complainant.

Filed Dec. 16, 1911.

JERROLD R. LETCHER,

Clerk.

(*Opinion of the District Court, by Judge, Johnson, Filed November 28, 1916, as to Defendant's Motion to Reopen Case for the Introduction of Further Testimony, etc.*)

The matter now before the court involves the meaning of the mandate of the Circuit Court of Appeals in this case, which reads:

"The decree below must be reversed, and the case must be remanded to the trial court for further proceedings consistent with the views expressed in this opinion, and it is so ordered."

Under this mandate a new trial is not ordered but the court is ordered to take such "further proceedings consistent with the views expressed in this opinion" as will dispose of the case.

I am of the opinion that the case now stands where it would have stood had Judge Marshall announced his decision in the language of the opinion of the Circuit Court of Appeals after the parties had rested at the conclusion of the trial. In such case he would have made such order as would have been considered necessary to bring on the hearing on the accounting, and as the case now stands the natural procedure would be the making of such an order at this time.

Under the circumstances above supposed it would have been within the discretion of Judge Marshall, even after he had announced his decision, to have opened the case and permitted the introduction of further evidence upon the part of the defendant, upon application made and a sufficient showing.

4 Corpus Juris, p. 818 et seq., and cases cited.

38 Cyc. p. 1360, and cases cited.

I do not think the mandate of the Circuit Court of Appeals has taken away the power of the court still to exercise a like discretion. That question, however, is not now before the court, so far the discretion of the court has not been appealed to, and I think it would be an abuse of discretion for the court of its own motion to open the case for a further hearing on the matters already submitted.

Since the defendant has suggested its desire to present further testimony, the order prayed for by plaintiff will be held in abeyance and the defendant given until and including the 16th day of December, 1916, in which it may present its application, upon such showing as it may deem proper, to reopen the case and introduce further testimony.

Endorsed: Filed in the District Court on Nov. 28, 1916.

(Opinion of the District Court, by Judge Johnson, Filed January 4, 1917, as to Defendant's Motion to Reopen Case and Plaintiff's Motion for a Decree in Accordance with the Mandate of the U. S. Circuit Court of Appeals.)

This case is before the court upon the motion of the plaintiff to enter a decree in accordance with the mandate from the Circuit Court of Appeals adjudicating the ownership of the premises and of the vein of ore in controversy to be in the plaintiff, and for an accounting; and also upon the application of the defendant to re-open the case and permit the introduction of further evidence by the defendant.

Upon a former hearing of plaintiff's motion, this court expressed the view that it had the same discretion in respect to opening
52 the case and permitting the introduction of further evidence that it would have had, had this court rendered a decision in favor of the plaintiff in the first instance.

Since that time, however, attention has been called to the case In Re Potts, 166 U. S. 263, in which case under conditions entirely similar to those in the case at bar, the Supreme Court of the United States declared the rule to be:

"When the merits of a case have been once decided by this court on appeal, the Circuit Court has no authority, without express leave of this court, to grant a new trial, a rehearing or a review, or to permit new defenses on the merits to be introduced by amendment of the answer."

It is apparent from the above rule that had the case at bar been decided and remanded by the Supreme Court of the United States, this Court would be without authority to do more than enter judgment in accordance with the opinion, and for an accounting. Assuming that the Circuit Court of Appeals would, if called upon to act, adopt the same rule with respect to its decisions as that announced by the Supreme Court of the United States, and I think this is a reasonable assumption, I conclude that the view heretofore expressed, that this court has a discretion in the matter, was a mistaken one.

The order will, therefore, be that the motion of the defendant be denied and the motion of the plaintiff granted.

The form of the decree and order will be considered and determined at 10 o'clock January 6th, at which time counsel for the respective parties may present such forms of the decree and order to be entered as they may deem proper.

Endorsed: Filed in the District Court on January 4, 1917.

(Opinion of the District Court, by Judge Johnson, Filed February 27, 1918, as to Accounting.)

This case is now before the court for its determination upon the accounting ordered in the decision of the Circuit Court of Appeals in this cause reported in 230 Federal, 553.

A statement of the facts respecting the title of the common property of the parties and the matters out of which this litigation arose appears in the decision above cited, as well as in the opinion of Judge Marshall filed herein, and these facts require no re-statement at this time.

53 In this opinion I shall confine myself to a statement of the rules to be applied in stating the account herein, with a brief discussion of the reasons which have led to the adoption of these rules.

The record in this matter is voluminous but in many respects unsatisfactory, and the best that can be hoped for is an approximation of a true account between the parties.

By reason of the unsatisfactory state of certain of the evidence counsel for the plaintiff have urged in their briefs the arbitrary adoption of the rule adopted by Judge Marshall in respect to the classification of the ore in the Silver King case. It is to be noted, however, that counsel have not urged the application of the rule adopted by Judge Marshall in that case in respect to the cubical contents of a ton of ore in place.

There are facts in evidence in this case which were lacking in the Silver King case. In this case the plaintiff had access to the ore body and the cavities from which the ore had been removed from about the middle of the year 1908 until the date of the former trial and decision in this court.

After the decision of Judge Marshall in favor of the defendant the plaintiff did not seek an entrance into the mine or access to the ore bodies or the stopes until after the case had been reversed by the Circuit Court of Appeals. In the Silver King case it appears that no attempt was made to keep an account of the quantity of ore removed from the mine or its classification, while in this case from about the first of May, 1909, books were kept in which a daily record was made of the cars removed from the mine with a classification of the ore. Upon the facts in evidence in this case I do not think the court would be justified in arbitrarily adopting the rule of classification applied by Judge Marshall in the Silver King case.

In this case the defendant has filed four separate accounts which differ one from another in respect to certain items contained in the account, and also in the final result. Certain of these changes in the body of the accounts have been called to the attention of the court and explained as arising from oversight or a change in theory in respect to the manner in which the account should be made up. Certain other changes have been made in the items of the account based apparently upon the opinion of witnesses called in the case, and respecting these changes no explanation has been made of any

54 mistake upon the part of the defendant company or of any of its officers or agents who made up the accounts. I assume that each one of these accounts was made up by the defendant upon data known to its officers or responsible agents, or from information received by them which they considered reliable, and I am of the opinion that the data given in these accounts made up in this way, should have great weight as expressing the best judgment of the defendant as to the fact, and, unexplained, should not be disregarded even though certain witnesses who testified in the case have given an opinion more favorable to the defendant.

In order to render a true accounting between the parties herein it is essential to have data upon several matters, namely: volume, classification, waste, metallic content, of ore, and price. These matters will be considered in their order.

Volume.

The total cavity mined within the limits of the Conkling ground, as given by the witness Brooks, is as follows:

1907	50,000 cubic feet
1908	37,120 " "
1909	104,295 " "
1910	29,355 cubic feet
1913	4,505 " "
1914	18,246 " "
1915	42,242 " "
1916	16,410 " "

These figures are not disputed by the plaintiff and are, in fact, adopted by it in all of its calculations in making up what it claims to be the true account.

In the first and second accounts the defendant has used 9 cubic feet as representing the volume of a ton of first class ore, and 11 cubic feet as representing the volume of a ton of second class ore. In the third and fourth accounts it has used 7.275 cubic feet for first class ore, and 10.3 cubic feet for second class ore. The figures used in the first and second accounts are adopted from the findings of Judge Marshall in the Silver King case, except that in that case 12 cubic feet was used as representing the volume of a ton of second class ore. The figures used in the third and fourth accounts are arrived at from the experiment made by the witness Brooks with the ore samples taken by him from the stopes during the course of the trial.

55 The witness Taylor made calculations, based upon the data furnished by the defendant company with respect to the contents of the cavity on the 600 level and the quantity of ores taken therefrom, that seem to me to be entitled to greater weight in the decision of this question than any other evidence offered in the case, and I shall adopt his conclusions, namely: 6 cubic feet for first class ore, 7.62 for second class ore.

Beginning with about the first of May, 1909, the defendant be-

gan to take ore from the mine at the 500 foot level of the Silver Hill shaft, and from that time on the ore was pegged showing its classification and an account kept of the classification of the ore from the pegging and the number of cars hoisted. The mine continued to be worked until about June, 1910, and then operations ceased until the latter part of 1913. The court would not be justified in disregarding these records and the testimony of the witnesses who were concerned in keeping them. The records may not be entirely accurate but they more nearly approximate accuracy, I believe, than the method urged by the plaintiff in its brief. The approximate accuracy at least of these records was assumed in the calculation made by the witness Taylor upon which has been based the finding of the cubical contents of a ton of first and second class ore. As used by the witness Taylor these records gave a fair and reasonable result, as I believe, with respect to the cubical contents of a ton of first and second class ore, and justifies their adoption in stating the account not only for the years 1914, 1915 and 1916 but for the year 1909 after the first of May, and for the year 1910.

Classification.

The ratio of first to second class ore for the year 1907 in defendant's first and second accounts is 1 to 2; in the third and fourth accounts, 1 to 1 $\frac{1}{5}$. Under the testimony it is uncertain what the exact proportion was of first to second class ore for this year, but from all the evidence I am led to the conclusion that as much as one-half of the ore removed during this year was first class ore.

For the year 1908 the ratio of first to second class ore, as given by the defendant in its first and second accounts, is 1 to 2; in its third and fourth accounts, 1 to 7. The ratio of 1 to 7 presumably is based upon the recollection of certain witnesses called at the trial who mined in the Elephant stope during the year 1908 who testified respecting this matter. Necessarily such evidence can have no great weight. The defendant, in making up its first and second accounts, presumably as I have said, from the knowledge or recollection of its officers and agents, or from information received by it from others which it believed to be reliable, placed the ratio at 1 to 2.

56 Considering this fact, together with the evidence given in the case by witnesses called by the defendant as well as those who testified for the plaintiff, I have reached the conclusion that the ratio of 1 to 2 is probably approximately correct.

As already intimated, the ratio of first class to second class ore for the years 1909 and 1910 and the years 1913, 1914, 1915 and 1916, will be based upon the classification shown by the shift boss books in evidence in the case.

Waste.

No waste is claimed by the defendant for the year 1907. In its first and second accounts the defendant gives the percentage of waste as "none" for the year 1908. In the third and fourth accounts,

14.3%. I do not believe the uncertain recollection of witness called in the case ought to outweigh the best judgment of the defendant at the time it made up its first and second accounts, sumably from information secured, as already suggested. This is especially true for this year in view of the testimony of the witness with respect to the appearance of the ore in the stope. No waste should be allowed for the year 1908.

For the years 1909 and 1910, and the years 1913, 1914, 1915 and 1916, an allowance of one-seventh for waste, under all of the facts in the case, probably more nearly approximates an average of waste than any other percentage, and for each of these years an allowance of one-seventh will be allowed for waste, where the matter of waste becomes important.

Metallic Content of Ore and Price.

In all of the accounts filed by the defendant it has assumed that the metallic content of the entire ore body that is to be accounted for in this action to be the same as the metallic content of the K-K shipment, and in the first three accounts the price allowed for the metallic content of the entire body of ore was the same as the price received on the K-K shipment.

The plaintiff, on the other hand, has ignored, except incidentally, the metallic content of the ores and adopted as a basis of the value of the ores the highest monthly averages of prices received by the defendant during any month of each of the several years covered by the account. This method was used by Judge Marshall in the Silver King case, Judge Marshall in that case saying: "There is no reliable evidence as to when the ores from this stope were marketed. In the case at bar it, I believe, sufficiently appears that the ores were moved by the defendant from the Conkling ground were marketed in due course and within probably thirty days from the time the ore was taken from the stopes, except the K-K shipments."

The evidence shows that the K-K shipments were taken from the Elephant stope, but from a consideration of all the testimony in the case, as well as the lack of testimony upon certain essential matters, I am not satisfied that these shipments represent the value of all the ores taken from the Conkling ground. There is a remarkable dearth of testimony respecting the assay value of the ores taken during the period of nine years while the mine was operated, and in view of the fact that the defendant mixed the ores taken from the Conkling ground with other ores mined by it, upon the principle applicable in the case of a confusion of goods, the metallic content of the ore taken should be determined from the average metallic content of all the ore shipped by it from year to year during the period of this account, or, as a practical matter in making up the account, disregarding the metallic content, the prices allowed for the ore in question should be based upon the yearly average prices received by the defendant for all the ores shipped by it, with the limitations hereafter mentioned.

Applying the general rules above given in detail, the account for the several years will be made up as follows:

1907.

The returns on the K-K shipments as shown by the books of said company in evidence.

The tonnage of the K-K shipment reduced to its volume in cubic feet and deducted from the 50,000 cubic feet of excavation mined during this year.

The tonnage and classification of the balance of said excavation determined upon the data heretofore given, and the price thereof fixed by taking an average of the prices received by the defendant for all of its ores shipped for the months of June, July, August, September, October, November and December.

1908.

To be calculated from the data heretofore given, the value of the ore to be determined by the average of the prices received by the defendant for its ores during this year.

1909 and 1910.

58 The time beginning with May, 1909, or the date when ore first began to be hoisted from the 500 foot level of the Silver Hill shaft until the operations ceased in 1910, will be treated as one period, and the ratio of first to second class determined by the ratio of first and second class ore as shown by the records kept by the shift bosses and others, in evidence in the case.

It is claimed in argument by the plaintiff that the Alliance cars, that is the cars used in hauling these ores, were larger in size than the cars used upon the Silver King side. This is true, but there is no certainty, under the evidence, that any considerably greater weight of ore was hauled in them than was hauled in the smaller Silver King cars. But the controlling consideration in this matter of the weight of cars is that in the calculation made by the witness Taylor upon which the cubical content of a ton of first and second class ore is determined, the difference in the weight of the cars, if any, was not taken into consideration, and if the result of his calculations without this matter being considered gives the cubical content of a ton of first and second class ore in place, it seems to follow that the difference in weight in the cars, if any, ought to be disregarded in other relations.

The weight of the cars to be used in this calculation will be the weights of cars given by the witness Daly for this period, namely: 2,100 pounds for first class, 1,650 pounds for second class. From these figures, together with the cubical contents of a ton of ore as found by the witness Taylor, may be determined the quantity of the space excavated during the years 1909, 1910, occupied by the ores

removed of which an account was kept; add to this quantity one-seventh for waste and deduct from the total cavity left by the ore removed during the years 1909 and 1910 leaves the cavity of the ores removed during the first four months of the year 1909 and of which no record was kept. Assuming the ratio of first and second class ore during this last mentioned period to be the same as that during the period from May 1909 to June 1910, the amount of first and second class ore contained in this cavity may be determined from the data given; the price for the year 1909, to be the average price for the year as above indicated, and the price of the ores mined during the year 1910 to be the average of the price received by the defendant for ores during the first six months of said year.

1913.

The data for stating the account for the year 1913 is unsatisfactory. The cavity for that year, furnished by the witness Brooks, was 4,505 cubic feet. The ore, as given by the shift boss books, leaves such a large proportion of this space to be occupied by waste as to seem unreasonable. Undoubtedly there is a mistake as to the volume of the cavity for this year, or the quantity of ore removed. The basis for calculation must, therefore, be more or less a surmise. As an approximation I have concluded to use the following: The ratio of first to second class as shown by the shift boss books; percentage of waste one-seventh; volume of cavity 4,505 cubic feet. With this data and that heretofore given, the quantity and class of ore to be determined, and the price to be an average of the prices of the ores sold by the defendant company during the months of November and December, 1913, and January, 1914—it being probable that some of this ore was marketed in the early part of the year 1914.

1914, 1915, and 1916.

The amount of first and second class ore as shown by the shift boss books, the weights of the cars to be the same as those used by the witness Taylor in making his calculations; the price of the ore for the year 1914 to be the average price of all the ores sold by the defendant during that year; the price for the year 1915 to be determined in the same manner; the price for 1916 to be the average price of the months during which the ore of that year was mined and marketed.

It may be remarked in this connection that the discrepancies appearing when the years 1914, 1915, and 1916 are considered separately, disappear when treated as a unit, as was done by the witness Taylor in his calculations.

Slimes.

The value of all slimes accounted for, to be included in the account.

Interest.

Interest at the legal rate should be allowed on yearly balances to date of decree.

The defendant is entitled to credits as charges against the value of the ore accounted for, as above indicated, as follows: mining charges \$4.50, sampling \$0.221, tramming \$0.20, milling \$1.10, per ton; the reasonable expense of all development or dead work done within the limits of the Conkling ground, except in respect to the Alliance tunnel and branch tunnels therefrom as hereinafter stated. For such development or dead work and raises, the allowance will be the value claimed by the defendant in its account, except in those cases where witnesses called by the defendant have given a smaller sum as a reasonable value.

60 The driving of the Alliance tunnel was prosecuted by the predecessor in interest of the defendant for the purpose of developing the country lying to the west, of which country the Conkling ground was only a part. After having discovered the ore body in the Elephant stope the defendant acquired what is known as the Belmont property and made use of the Alliance Tunnel during the years from 1907 to 1916 for the development of the Belmont property and the removal of the ores discovered therein, as well as the removal of the ores found in the Conkling ground. As I view it, it would be unjust to charge all the expense of running this tunnel to the Conkling property, as it would be inequitable not to charge any of this expense to the Conkling ground. It may be true that at the present time this tunnel does not add any value to the Conkling property. For aught that appears in the record practically all of the ore in the Conkling ground has been removed, and tunnels upon a worked-out mine never have any substantial value. The value of this tunnel to the Conkling property must be considered as of the time when the ore was discovered, rather than now when the ore has all been removed. On the other hand, this same tunnel has been used for nine years by the defendant in connection with its ownership of the Belmont property. Considered from the standpoint of what was equitable and right at the time that the ore bodies in those properties were first discovered and before they had been removed, and considered in the light of the fact that the defendant has made use of this tunnel in the removal of the ore from its Belmont property, I have reached the conclusion that one-half of the cost of running the Alliance tunnel and tunnels branching therefrom, within the limits of the Conkling ground, except the McKay crosscut, should be charged against the common fund. In this connection, however, it may be said that a part of the tunnel, in its progress through the Conkling ground, runs outside of and beyond the north line of the Conkling claim. At the trial of this cause the defendant stood upon its legal rights with respect to that part of the tunnel run outside of the north line of the Conkling claim, and that part of the tunnel should be excluded in making up this credit. The defendant, in its account of the cost of this work, used the

figures \$15.38, \$26.186 and \$54.073 which give to the account an air of accuracy to which it is not entitled. These figures are based upon the estimate made by the witness Walden, which, at best, can only be called rough estimates. As, under the evidence, only
61 estimated values are possible, round numbers will be used in making up the account, namely: \$15.00, \$25.00, and \$50.00, will be used as approximations to the actual cost in running this tunnel.

Had the figures used in the account of the defendant been based upon the books and records of the Kearns-Keith Company, I should not hesitate to adopt them, and it is somewhat remarkable that in carrying on this work the Kearns-Keith Company failed to keep records of the expenditures incurred in its prosecution.

The defendant is entitled to credit for half of the cost of cleaning up the tunnel within the limits of the Arthur claim, but the price allowed for such work should be \$1.00 per foot where in the account the charge is \$1.25.

I do not believe the evidence [sufficient] to justify the court to require the defendant to account for these ores at price higher than it actually received for them. It may be possible that, looking back, the flat rate provided in the Heinz contract may have proven unfavorable to the defendant in the marketing of its ores, but I can find nothing in the evidence that would justify a finding that it was entered into in bad faith or for ulterior purposes.

Interest should be allowed at the legal rate upon yearly balance to the first day of May, 1907.

It is possible that the defendant should be allowed some credit for the use of its improvements, etc., during the period of these mining operations. There is no substantial evidence in the record of the nature and extent of such use or of its reasonable value. I do not think a pro rata part of an interest charge upon the value of the defendant's improvements a legitimate basis for a determination of the value of such use. That item of the defendant's account will be disallowed.

No point has been made in the briefs of counsel with respect to the use by the defendant of the water flowing from the Alliance tunnel, and the defendant will not be required to account in respect thereto.

The plaintiff is requested to determine the amount due it upon a statement of the account as herein provided, and to submit such amount so found due to the court with a form of decree.

The defendant will be afforded opportunity to object to the amount so found by the plaintiff and for the correction of
62 any errors which it may claim to have occurred in the calculation.

Endorsed: Filed in the District Court on February 27, 1918.

(Decree of the District Court, March 27, 1918.)

This cause came on to be further heard at this term upon the account of the defendant, and the testimony and proofs presented by the parties in support of the same and in opposition thereto and was argued by Counsel; and thereupon, upon consideration thereof.

It was Ordered, Adjudged and Decreed as follows, to-wit:

That there is due from defendant, Silver King Coalition Mine Company, to the plaintiff, the Conklings Mining Company, upon an accounting for the ores, minerals and mineral-bearing rock by the said defendant and its grantor and predecessor in interest Koonce Keith Mining Company, taken from the land and premises owned in common by the plaintiff and defendant, the sum of Five Hundred Forty-two Thousand Two Hundred and Twenty Two and 58/100 Dollars, (\$542,222.58), and

It was Further Ordered, Adjudged and Decreed that the plaintiff do have and recover from the said defendant, the said sum of Five Hundred Forty Two Thousand, Two Hundred Twenty two and 58/100 Dollars (\$542,222.58) so found due as aforesaid, together with plaintiff's cost herein taxed at the sum of _____ Dollars (\$ _____) with interest upon the full amount thereof from the first day of March, 1918, at the rate of 8% per annum, and that plaintiff have execution therefor.

Dated March 27, 1918.

TILLMAN D. JOHNSON,

District Judge.

Endorsed: Filed in the District Court on March 27, 1918.

(Stipulation as to Opinion of District Court, Filed February 27, 1918, Being Made a Part of the Record.)

It is hereby stipulated in the above entitled cause that the opinion of the Court heretofore filed herein, on the 27th day of February,

1918, containing the Court's finding in respect to volume, classification, waste, metallic contents of ore, prices, etc., shall become and be deemed to be a part of the record in this case, and that an order may be entered by the Court accordingly.

PIERCE, CRITCHFIELD &
BARRETTE &
W. W. RAY.

Solicitors for Complainers.

W. H. JOHNSON,
T. MARCHEAUX,
A. C. ELLIS,
R. G. LUCAS.

Solicitors for Defendant.

Dated: April 16, 1918.

Endorsed: Filed in the District Court on April 17, 1918.

(Order April 17, 1918, Making Opinion Filed February 27, 1918, a Part of the Record in This Case.)

At this day comes said plaintiff, by E. B. Critchlow, its solicitor, and the defendant, by Thomas Marioneaux, its solicitor also comes. And pursuant to the stipulation filed herein signed by the solicitors for said parties respectively, and on motion of said defendant, it is ordered that the opinion of the Court heretofore filed herein on the 27th day of February, 1918, containing the Court's findings in respect to volume, classification, waste, metallic contents of ore, prices, etc., shall become and be deemed to be a part of the record in this cause.

(Statement of the Evidence.)

Filed in the District Court June 19, 1918.

Be it remembered that heretofore and on the 5th day of July, 1909, said complainant filed its amended complaint in the Circuit Court of the United States, for the District of Utah, which being entitled in said court and cause, is in words and figures, following, to-wit:

Amended Bill of Complaint.

To the Honorable the Judges of the Circuit Court of the United States in and for the District of Utah:

The Conkling Mining Company, a corporation organized and existing under the laws of the State of Utah, and a citizen of the State of Utah, by leave of this Court first had and obtained, 64 files this, its Amended Bill of Complaint, against the Silver King Coalition Mines Company, a corporation organized and existing under the laws of the State of Nevada, and a citizen of the State of Nevada; and thereupon your orator respectfully represents and alleges:

I.

That on or about the seventeenth day of September A. D. 1908 Nicholas Treweek and J. Leonard Burch, the original complainants herein, caused your orator to be duly incorporated under the laws of the State of Utah for the purpose and pursuit of mining.

That the capital stock of your orator was paid for upon the incorporation of said company by a conveyance and transfer to your orator by said Nicholas Treweek and J. Leonard Burch of all their right, title and interest (being an undivided three-fourths) in and to the Conkling Lode Mining Claim, patented as U. S. Lot No. 689, and the Arthur Lode Mining Claim, patented as U. S. Lot No. 690, situated in the Uintah Mining District, County of Summit and State of Utah, and also by an assignment and transfer to your orator of all manner of actions, and causes of actions, suits, dues, demands, controversies and accounting of every kind and nature

whatsoever in favor of said Nicholas Treweek and J. Leonard Burch against the defendant herein.

II.

That said defendant corporation was organized and incorporated under the laws of the State of Nevada, on or about the month of May, 1907, to consolidate and take over sundry mining claims and properties, including the Kearns-Keith Mining Company and the Silver King Mining Company, respectively corporations, which said last-named companies theretofore and for a long time had been engaged in the business of mining in the Mining District where said Conkling and Arthur Lode Mining Claims are situated.

III.

That in and by said consolidation and merger the defendant corporation succeeded to the interest then and theretofore owned by said Kearns-Keith Mining Company in and to said Conkling and Arthur Lode Mining Claims, viz., an undivided one-fourth ($\frac{1}{4}$) interest therein.

That on or about the twenty-second day of September, 1903, said Kearns-Keith Mining Company, predecessor in interest and grantor of the defendant herein, became the owner of said undivided
65 one-fourth ($\frac{1}{4}$) interest in and to said Conkling and Arthur Lode Mining Claims, and ever since continued to be the owner thereof until the same was transferred to and merged in the defendant company as aforesaid, to-wit, on or about the twenty-ninth day of May, 1907.

III.

That during all of the times said Kearns-Keith Mining Company was the owner of said undivided one-fourth ($\frac{1}{4}$) interest in said Conkling and Arthur Lode Mining Claim, the said Nicholas Treweek, as tenant-in-common with said Kearns-Keith Mining Company, was the owner of an undivided one-half ($\frac{1}{2}$) interest in and to said mining claims and each of them.

That upon the transfer by said Kerns-Keith Mining Company to the defendant as aforesaid, said Treweek continued to be a tenant-in-common with the defendant herein in said mining claims and each of them, and so continued to be until the transfer to your orator as hereinbefore alleged.

IV.

That said J. Leonard Burch since on or about the sixteenth day of May, 1906, until the transfer to your orator herein, was the owner of an undivided one-fourth ($\frac{1}{4}$) interest in and to said Conkling and Arthur Lode Mining Claims. That as such owner since said sixteenth day of May, 1906, he was a tenant-in-common

with said Kearns-Keith Mining Company in said mining claims and each of them until the time of the transfer by said Kearns-Keith Mining Company of its interests therein to the defendant herein, and since the time of said transfer he was a tenant-in-common with the defendant herein in said claims and each of them, until he transferred his interest to your orator as hereinbefore alleged.

V.

That on or about the twenty-third day of February, 1892, the United States of America by its letters patent granted to the Boss Mining Company, a corporation, those certain premises called the Conkling and Arthur Lode Mining Claims, respectively situated in the Uintah Mining District, County of Summit, then territory, now State of Utah, said Conkling Lode Mining Claim being particularly bounded and described in said patent, to-wit:

“Bounded, described and platted as follows, with magnetic variation seventeen degrees and twenty minutes east.
66 Beginning at Corner No. 1, a pine post four inches square marked U. S. 689 P. 1.

Thence first course north twenty-one degrees and nine minutes west three hundred feet to discovery point six hundred feet to corner No. 2, a pine post four inches square marked U. S. 589 P. 2, being also corner No. 4, of Lot No. 191, the Lincoln lode claim, and corner No. 2 of Lot No. 580, the Pirate King Lode claim from which U. S. mineral monument No. 4 bears north thirty-two degrees and fifty-two minutes west nine hundred and thirty-nine and three-tenths feet distant, and a pine tree four inches in diameter marked U. S. 689 P. 2 B. T. bears north thirteen degrees west twenty-eight feet distant.

Thence second course, south sixty degrees and forty-five minutes west one thousand five hundred feet to corner No. 3.

Thence third course south twenty-one degrees and nine minutes east six hundred feet to corner No. 4.

Thence fourth course north sixty degrees and forty-five minutes east one thousand five hundred feet to corner No. 1, the place of beginning; said Lot 689 extending one thousand five hundred feet in length along said Conkling vein or lode, and containing twenty acres and forty-five hundredths of an acre of land more or less.”

and said Arthur Lode Mining Claim being particularly bounded and described in said patent, to-wit:

“Bounded, described and platted as follows, with magnetic variation seventeen degrees and twenty minutes east,

Beginning at corner No. 1 a pine post four inches square marked U. S. 690 P. 1, with mound of stones being also corner No. 1 of Lot No. 689, the Conkling lode claim.

Thence first course, north twenty-one degrees and nine minutes west, three hundred feet to discovery point, six hundred feet to corner No. 2, a pine post four inches square marked U. U. S. 690,

P. 2, in mound of stones being also corner No. 2 of said Lot No. 689, corner No. 2, of Lot No. 580 the Pirate King Lode Claim, and corner No. 4, of lot No. 191, the Lincoln lode claim from which U. S. mineral monument No. 4 bears north thirty-two degrees and fifty-two minutes west nine hundred and thirty-nine and three tenths feet distant; and a pine tree four inches in diameter marked U. S. 690 P. 2 B. T. in mound of stones bears north thirteen degrees west thirty-eight feet distant.

67 Thence, second course, north seventy-six degrees and fifty-seven minutes east nine hundred and fifty-one and eight tenths feet to corner N. 3.

Then third course south, twenty-one degrees and nine minutes east one hundred and thirty-eight and eight tenths feet intersect line 2-3, of Lot No. 342, the Pay Rock No. 2, lode claim, at north seventeen degrees and twenty minutes east one hundred and thirty-two and four tenths feet from corner No. 3, three hundred feet intersect line 3-4 of said Lot No. 342 at south seventy-two degrees and forty minutes east one hundred and five and three-tenths feet from corner No. 3, six hundred feet to corner No. 4.

Thence fourth course south seventy-six degrees and fifty-seven minutes west nine hundred and fifty-one and eight tenths feet to corner No. 1, the place of beginning. Expressly excepting and excluding from these presents all that portion of the ground hereinbefore described embraced in said mining claim or survey No. 342, and also all that portion of said Arthur vein or lode, and of all veins, lodes and ledges, throughout their entire depth, the tops or apexes of which lie inside of such excluded ground; said lot No. 690 extending nine hundred and fifty-one and eight tenths feet in length along said Arthur vein or lode the granted premises in said lot containing twelve acres and eighty-two hundredths of an acre of land, more or less."

VI.

That under and beneath the surface and within the exterior boundaries of each of said mining claims extended downward vertically, there is a lode or vein of rock in place, bearing silver, lead and other valuable minerals, extending on its course or strike through the length of said claims. That said mining claims and each of them are only valuable for the ores and minerals therein contained.

VII.

That, as your orator is informed and believes, ever since the incorporation of said defendant company the defendant herein has been and still is in possession of said vein or lode within the premises hereinbefore described and all the ores and minerals therein, working and developing the same and extracting said ores and minerals therefrom. Also upon information and belief, your orator alleges that prior to the incorporation of the defendant as hereinbefore alleged, its said-grantor and predecessor in interest, the Kearns-Keith

68 Mining Company, was in possession of said vein or lode and all the ores and minerals therein within the planes aforesaid, working and developing the same and extracting the ores and minerals therefrom.

That said defendant and said Kearns-Keith Mining Company gained access to said Mining Claims and premises and said ores, beneath the surface and within the said boundaries of said mining claims extended downward vertically, by means of extending certain underground works situated upon other property, now owned by the defendant and prior to the incorporation of the defendant company owned by said Kearns-Keith Mining Company and Silver King Mining Company, which were merged into the defendant company as hereinbefore alleged, and to which said underground works your orator herein and its said grantors and predecessors in interest have had no access or means of access, and from which they have been, and your orator is and has been, excluded by said defendant, except as permitted to enter by the order of the Court herein, made on the thirtieth day of June, 1908.

VIII.

That, as your orator is informed and believes, the defendant herein since its said incorporation and said Kearns-Keith Mining Company, the grantor of said defendant, prior thereto by means of said underground works, have extracted large quantities of ore from said Conklings and Arthur Lode Mining Claims within the planes aforesaid. That the ores so extracted by the defendant and its said grantor, said defendant has appropriated and converted to its own use. That the value of said ores, so extracted by the defendant and its said grantor, your orator is unable to specify with exactness, but upon information and belief alleges the same to exceed in value the sum of one million dollars (\$1,000,000.00).

IX.

Your orator further alleges that said grantors of your orator did, prior to the commencement of this action, demand from said defendant that it account to them, as tenants-in-common with it in said mining claims, for the ores and minerals by it and its said grantor removed from said premises and disposed of, and for their just and proper share of the value thereof. That said defendant company failed and refused to give to said grantors of your orator any accounting whatsoever for the ores or minerals by said defendant company extracted and removed from said premises, or to pay to them or either of them their just, or any, proportion of the value thereof.

69 That after the incorporation of your orator, and after your orator succeeded to the rights and interests of said Nicholas Treweek and J. Leonard Burch in and to said mining claims and each of them, to-wit, on or about the thirtieth day of November, 1908, your orator demanded of said defendant an accounting as tenant-in-common in and to said mining claims and for your orator's

just proportion of the value of the ores mined from underneath the surface of said Conkling and Arthur Lode Mining Claims between planes drawn down vertically through the exterior boundaries of said mining claims as herein described. That said defendant company has entirely ignored said demands and failed and neglected to make answer thereto, except as hereinafter alleged, and refused to let your orator into the possession of either of said mining claims, or to in any manner account to or with your orator in the premises.

X.

That the defendant asserts, pretends and claims an exclusive interest (not as tenant-in-common with your orator) in a portion of said premises, to-wit, the southwest one hundred thirty-five and one-half (135.5) feet of said Conkling Lode Mining Claim, as hereinbefore described, adverse to your orator, and to have exclusive right and ownership of all the ores contained therein within planes extended downward vertically from the following described lines: to-wit, Bounded on the southwest by the southwest end of said Conkling Claim as hereinbefore bounded and described and on the northeast by a line drawn parallel thereto and one hundred and thirty-five and five tenths feet distant therefrom, and by the respective side lines of said Conkling Mining Claim as hereinbefore described; and said defendant has given out in speech, and otherwise, that it has the exclusive right to enter in and upon said premises and remove ore therefrom without accounting to your orator as a tenant-in-common with it as aforesaid, because of its alleged ownership of certain overlapping and conflicting mining claims called the Custer No. 2 and Silver Hill No. 4 and also because it asserts that the boundaries of said Conkling Claim as described in the patent thereof and herein, are not the proper boundaries thereof to the extent of including the said southwest 135.5 feet of said Conkling Claim as hereinbefore described and bounded.

That the alleged claims and pretenses of said defendant are false and untrue, and unfounded in fact; also that by reason of the facts herein alleged the said defendant ought not to be permitted to controvert and vary the location and boundary of said Conkling Claim upon the ground as the same are described in said patent and herein, or to assert an interest adverse to your orator or otherwise, if at all, than as trustee holding the title of said overlapping and conflicting Silver Hill No. 4 and Custer No. 2 Lode Mining Claims for the benefit of the defendant and your orator as tenants-in-common in said Conkling Lode Mining Claim, according to their respective interest therein as hereinbefore alleged. That the description of the location of said Conkling Lode Mining Claim, as described herein, is the same and identical description as described in the patent and as patented. That in and by said description contained in said patent, the location of the boundaries of said Conkling Lode Mining Claim can be readily traced ascertained and determined upon the ground, all of which has, at all of the times herein mentioned, been well known to said Kearns-Keith Mining

Company, and to the defendant herein, as your orator verily believes. That ever since said Conkling Lode Mining Claim was patented, the owners of said claim have never had any dispute or contention over, or disturbance of, their ownership and right of possession of said Conkling Lode Mining Claim as described herein and as located upon the ground by said description contained herein and in said patent, or of or to any part or portion of said claim until the wrongful acts and conduct of the defendant and its said grantor, Kearns-Keith Mining Company, as co-tenant or tenants-in-common with your orator and its grantors as herein alleged.

XI.

That the defendant herein and its said grantor Kearns-Keith Mining Company subsequent to said twenty-second day of September 1903 (the actual time of which your orator has no means of ascertaining), as your orator is informed and believes, did secretly extend a certain tunnel called the Alliance Tunnel through and underneath said Conkling Lode Mining Claim from the northeast boundary of said claim to the southwest end boundary of said claim; also secretly drove a cross-cut extending from said Alliance Tunnel, so extended underneath said Conkling Lode Mining Claim, to near the southwest corner of said Conkling Lode Mining Claim as described in said patent and herein. That said Alliance Tunnel at the time of the incorporation of said Kearns-Keith Mining Company did not extend to the boundaries of said Conkling Lode Mining Claim,

or any part or portion thereof, as your orator is informed
 71 and believes. That said tunnel and cross-cut, so extended, are upwards of one thousand three hundred (1,300) feet in depth below the surface of said Conkling Lode Mining Claim. That said secret openings so made underneath the surface and within the boundary planes of said Conkling Lode Mining Claim extended down vertically, can be entered through the main shaft of said Silver King Mining Company and the levels and drifts therefrom, or through said Alliance Tunnel, only; that said shaft, drifts, levels and said Alliance Tunnel are under the exclusive ownership and control of the defendant (except only as to right reserved to Thomas Kearns, and his assigns, to use said Alliance Tunnel) and prior to said merger, during the time aforesaid were under the exclusive ownership and control of said Silver King Mining Company, with the right reserved to said Kearns or his assigns as aforesaid, which said right, so reserved, upon information and belief, your orator alleges said Kearns assigned and transferred to said Kearns-Keith Mining Company upon its incorporation. That in so drifting and extending said cross-cut from said tunnel, and said defendant, and prior to said merger, said Keith-Kearns Mining Company, secretly discovered and explored a large and valuable ore deposit upon which said Kearns-Keith Mining Company, prior to said merger, and said defendant, subsequent thereto, secretly discovered and explored a large and valuable ore deposit upon which the said defendant and its grantor have made extensive stoping and secretly removed therefrom

ore of the value of not less than one million dollars (\$1,000,000.00) as your orator is informed and believes.

XII.

That the description of the said Conklin Lode Mining Claim as asserted and pretended to be by the defendant herein as aforesaid is such that it is within the boundary planes of said Conkling Lode Mining Claim, as described in the patent thereof as aforesaid, extended downward vertically, and principally within the boundary planes extended downward vertically of said southwest 135.5 feet of said Conkling Lode Mining Claim, as hereinbefore described, that the principal part and value of said ore so secretly found and discovered as aforesaid was and is contained.

That the value of said ore so found and discovered within the planes extended downward vertically from the boundaries of said southwest 135.5 foot strip of said Conkling Lode Mining Claim, as hereinbefore described is, as your orator is informed and believes, not less than two million five hundred thousand dollars (\$2,500,000.00).

72 That all of the aforesaid secret underground work and discovery of ore and removal of ore were intentionally and wrongfully kept secret by the said defendant and by its grantor, the Kearns-Keith Mining Company, from your orator's grantors and predecessors in interest, Nicholas Treweek and J. Leonard Burch, as your orator is informed and believes, and unknown to them or either of them until as hereinafter alleged. That on or about the month of April, 1907, the then owners of the interest now owned by your orator in said Conkling Lode Mining Claim, to wit, said Nicholas Treweek and J. Leonard Burch, became suspicious that there had been secret developments made in said Conkling and Arthur Lode Mining Claims by the said Kearns-Keith Mining Company, and thereafter, after said merger, applied to said defendant for admission to any underground workings beneath the surface of said Conkling and Arthur Lode Mining Claims; that said application was refused by the said defendant. That thereafter, on or about the month of December, 1907, said Nicholas Treweek and J. Leonard Burch, as tenants-in-common with the said defendant in said Conkling Lode Mining Claim as aforesaid, demanded of said defendant an accounting for their respective shares of the proceeds of any and all ores taken from said Conkling and Arthur Lode Mining Claims; that said defendant, in response to said demand, expressed great surprise at the demand made upon it as aforesaid, and reminded said Nicholas Treweek and J. Leonard Burch that the defendant was a co-tenant with them in the ground they claimed, viz., the Conkling and Arthur Lode Mining Claims, and also asserted that it had spent a great deal of money in explorations, and claimed the right to remove and extract sufficient ore, had there been any in the said Conkling and Arthur Lode Mining Claims, to repay the said defendant for the money expended in such explorations, before the said Nicholas Treweek and J. Leonard Burch, as tenants-in-common,

with said defendant, could set up any claim for an accounting. That in reference to the demand made for the privilege of entering the workings for the purpose of making an examination and survey, the defendant asserted and contended that such demand, so made, was not with the hope of finding the conditions in reference to the defendant having mined ore in said Conkling and Arthur Lode Mining Claims, as suspected, but charged some ulterior and improper purpose or motive in said demand and request so made by said Treweek and Burch.

73

XIII.

Your orator further alleges that after the secret discovery by said defendant and its grantor, Kearns-Keith Mining Co., of ore of great value as aforesaid and within that portion of said Conkling Lode Mining Claim hereinbefore referred to as the southwest 135.5 feet thereof, and said Kearns-Keith Mining Company, the predecessor in interest and grantor of the defendant herein, as aforesaid, prior to the incorporation of the defendant, to wit, in the years 1906 and 1907, made and caused to be made cunning efforts to purchase the interest in said mining claims owned by said Treweek and said Burch, representing that said interests were of no special value, and offering to pay for said interest the sum of fifteen thousand dollars (\$15,000.00) and no more. That the first suspicion said Treweek and Burch had of the possibility of there having been underground developments made in said Conkling and Arthur Lode Mining Claims as aforesaid, arose after the last attempt of said Kearns-Keith Mining Company to purchase their interest in said Conkling and Arthur Lode Mining Claims for said sum of fifteen thousand dollars (\$15,000.00) and after the purchase of said Custer No. 2 and Silver Hill No. 4 Mining Claims, as herein alleged.

XIV.

Your orator further alleges that after failing to purchase the interest of said Treweek and Burch in said Conkling and Arthur Lode Mining Claims as aforesaid, the defendant's said grantor, Kearns-Keith Mining Company, did thereafter and during the month of April 1907, purchase from the Belmont Mining Company, a corporation, for a consideration not exceeding one hundred fifty thousand dollars (\$150,000.00), as your orator is informed and believes, the Custer No. 2 and the Silver Hill No. 4 Lode Mining Claims, then owned by the said Belmont Mining Company, and took a conveyance for the same in the name of said Thomas Kearns, Trustee, who was then the President or Manager of said Kearns-Keith Mining Company. That upon the incorporation of the defendant herein said Thomas Kearns, as Trustee, wrongfully conveyed the said mining claims, and the whole thereof, exclusively to the defendant herein. That said Custer No. 2 and Silver Hill No. 4 lode mining claims, Survey No. 4850, were, by Letters Patent dated June 2, 1904, granted from the United States of America to the Belmont Mining Company.

74 That said Patent was based upon location notices antedating the location of said Conkling lode mining claim. That as patented, said Custer No. 2 and Silver Hill No. 4 lode mining claims, overlap and include a large area of said Conkling lode mining claim as patented and described in the patent thereof and herein, including within said overlap all of the area of said Conkling lode mining claim included within the southwest 135.5 foot strip thereof, except only a small area at the northwest corner of said Conkling lode mining claim as herein described, and particularly included within said overlap, all that portion of said 135.5 foot strip wherein said ore was discovered and contained as aforesaid.

That during all the period aforesaid, while the said Treweek and Burch and the said Kearns-Keith Mining Company were tenants in common as aforesaid in said Arthur and Conkling lode mining claims, the said Kearns-Keith Mining Company and said Treweek and Burch were as tenants in common as aforesaid in the actual possession of said claims and each of them, to the full extent and area thereof as herein specifically described, including said southwest 135.5 foot strip of said Conkling claim as herein described. That said purchase from said Belmont Mining Company of said Custer No. 2 and Silver Hill No. 4, was made as hereinbefore alleged while said Kearns-Keith Mining Company and said Treweek and Burch, as tenants in common, were in the possession as aforesaid of said Arthur and Conkling claims, including all the aforesaid overlapping area thereof covered by said Custer No. 2 and Silver Hill No. 4 lode mining claims. That at and prior to the time of the purchase of said Custer No. 2 and Silver Hill No. 4 mining claims as aforesaid, no ore had been found or developed within the said claims or either of them as your orator is informed and believes except the aforesaid ore bodies developed prior to said purchase within said area overlapping said Conkling mining claim as herein described and as patented, and as then and during all the times prior thereto while said Treweek and Burch and said Kearns-Keith Mining Company as tenants-in-common in said Conkling claim as aforesaid were as such tenants in common and not otherwise, in the lawful and actual possession thereof as part and parcel of said Conkling lode mining claim.

That until the purchase by the said Kearns-Keith Mining Company of the said Custer No. 2 and Silver Hill No. 4 lode mining claims, neither the said defendant nor its said grantors held or claimed any right or interest in or to the premises described in the patent of said Conkling lode mining claim, or in or to the lodes or veins within the boundary planes thereof as described in said
75 patent, or in or to the southwest 135.5 foot strip, or in or to the lodes or veins therein, except the right and interest held by the said defendant and its said grantor, the said Kearns-Keith Mining Company, as tenant in common with your orator and its predecessors in title under the patent and grant from the United States of America of the Conkling mining claim hereinbefore set forth; and after said purchase neither the said Kearns-Keith Mining Company, nor the defendant, made any independent claim nor any

claim at all adverse to your orator, or adverse to the said Treweek and Burch in or to said premises or any part thereof until on or about the 11th day of April, 1908.

That in the secret extension of said Alliance Tunnel as hereinbefore set forth and continuously during the progress of said work, the said defendant and its said grantor carried on said work, claiming to be so operating as tenants in common with your orator and your orator's predecessors in title, said Treweek and Burch, and for the discovery and development of ore within the exterior boundaries extended downward vertically of said Conkling mining claim, and claimed of and from its co-tenants, payment and reimbursement out of the ores developed in said Conkling mining claim for the cost and expense incurred in said work. That while so carrying on said work as such tenant in common as aforesaid and while claiming to be carrying on the same for the development of said properties so held and claimed in common, and while claiming reimbursement, by reason of said cotenancy, out of the ores within said Conkling mining claim for the cost and expense of extending said tunnel, the defendant's said grantor, the said Kearns-Keith Mining Company secretly discovered said ore body within said 135.5 foot strip, and, fraudulently contriving to deprive its co-tenants of their just and any proportion of the value of said ore, and contriving and intending to secure to the said defendant's grantors, the benefit of the whole thereof, the said Kearns-Keith Mining Company secretly and without informing your orator's predecessors in title of the discovery of said ores, purchased as aforesaid said Custer No. 2 and Silver Hill No. 4 mining claims, and thereafter held the same secretly, and after developing the said ground and fully ascertaining the extent of said ore bodies and the value of the ore contained therein—for the first time made known to your orator's predecessors in title that the said Kearns-Keith Mining Company claimed adversely said 135.5 foot strip, and for the first time, pretended and claimed that said 135.5 foot strip was not within the boundaries or planes of said Conkling mining claim.

76

That said Kearns-Keith Mining Company secured title to said Custer No. 2 and Silver Hill No. 4 mining claims by reason of its possession of said premises under its claim thereto as tenant in common and under its claim that the same was part of the Conkling mining claim, and purchased said Custer No. 2 and Silver Hill No. 4 mining claims because of its knowledge obtained while extending said tunnel (and while so in possession as tenant in common with your orator's predecessors in title) of the valuable ore body within said 135.5 foot strip,—contriving and intending by means of such adverse claims, to deprive your orator and its predecessors in title of the ore discovered and partially extracted and sold by the said Kearns-Keith Mining Company while in possession of said property and of said 135.5 foot strip as tenant in common with your orator's predecessors in title, the said Treweek and Burch. That the said pretensions of the said defendant that the boundaries of said Conkling lode mining claim as described in the patent and herein are not its true boundaries, but that the southwest 135.5 feet of said

Conkling lode Mining claim, as the same is bounded and described in the patent [and] herein, should not be included therein when located upon the ground, constituted the first notice that said Treweek and Burch, or either of them, ever had that any such claim, pretension or contention existed, from any source whatsoever. That said claim and assertion first came to the notice or knowledge of said Treweek or Burch, or either of them, on or about the 11th day of April, 1908, as your orator is informed and believes.

XV.

Your orator further alleges that under and pursuant to an order of this Honorable Court, made herein on the thirtieth day of June 1908, permitting the then complainants herein, Nicholas Treweek and J. Leonard Burch, with their experts, agents and surveyors, the free and unmolested right to enter upon the aforesaid underground workings for the purpose, among other things, of measuring and determining the amount and value of the ore that had been mined by the said defendant company underneath the surface of said Conkling and Arthur Lode Mining Claims, the said Treweek and Burch were able for the first time to, and did, ascertain the actual facts in respect to said secret underground workings as aforesaid, underneath the surface boundaries of said Conkling Lode Mining Claim as described in said patent and herein, within planes extended downward vertically, and of the location of the ore body within said Conkling Lode Mining Claim, and the Character and extent of the ore body developed therein, and of the importance and great value of said Conkling Lode Mining Claim, which is only valuable for the ores therein contained.

XVI.

Your orator further alleges, upon information and belief, that the said defendant herein since it succeeded to the interest of said Kearns-Keith Mining Company in said Conkling Lode Mining Claim as aforesaid, and the said Kearns-Keith Mining Company prior thereto and subsequent to its purchase aforesaid, and while said companies were respectively as aforesaid tenants-in-common with said Treweek and Burch in said Conkling and Arthur Lode Mining Claims, and the discovery of ore therein and the extraction and removal of ore from said Conkling Lode Mining Claim, for the purpose of taking wrongful and undue advantage of said Treweek and Burch, as co-tenants as aforesaid, endeavored to purchase their said three-fourths interest therein for a trifling sum compared with the actual value as then known exclusively to the said defendant herein, and its said grantor, the Kearns-Keith Mining Company.

XVII.

Your orator further alleges, upon information and belief, that said overlapping junior patented claims, to-wit, the Custer No. 2 and Sil-

ver Hill No. 4, were purchased as aforesaid without the knowledge, acquiescence or consent of said Treweek and Burch, or either of them, for the purpose and with the intention of defrauding said Treweek and Burch and your orator, as tenants-in-common with the said defendant and its grantor, the Kearns-Keith Mining Company, in said Conkling Lode Mining Claim as aforesaid, out of their just and proper rights in the premises, and particularly from that portion of said Conkling Lode Mining Claim wherein the principal part and value of said ore, so secretly discovered as aforesaid, is contained. Also that the attempt on the part of the defendant herein to describe and locate the said Conkling Lode Mining Claim so as to exclude the southwest 135.5 feet thereof, as aforesaid, is made with a like intention and purpose, as your orator is informed and believes. That neither your orator, nor its said grantors Nicholas Treweek and J. Leonard Burch, were ever notified by said defendant or its grantor, Kearns-Keith Mining Company, as it and they were in duty bound to do, of said purchase of said Custer No. 2 and Silver Hill No. 4 Mining Claims, or permitted to participate in said purchase. That ever since said purchase of said Custer No. 2 and Silver Hill No. 4

Claims as aforesaid, your orator since its incorporation has
78 been, and prior thereto said Treweek and Burch were, and your orator still is, ready, able and willing to pay and contribute to the defendant for its proper share and proportion, to-wit, three-fourths ($\frac{3}{4}$) of the purchase price paid to said Belmont Mining Company for said claims, or such other or further sums as to Your Honors may seem meet; and here and now offers to pay the same as this Honorable Court may direct. That by reason of said purchase of said claims by said defendant, your orator is, and its grantors have been, greatly and wrongfully prejudiced as tenants-in-common as aforesaid with said defendant and its said grantor in said Conkling Lode Mining Claim.

XVIII.

And your orator further shows and alleges that the survey of said Conkling Lode Mining Claim purports to have been made in November of the year 1889 by Adolph Jesson, now deceased, then Deputy United States Mineral Surveyor; that all other persons connected with the making of said survey of said Conkling Lode Mining Claim are either dead or their whereabouts unknown, as plaintiff is informed and believes; that said Conkling Lode Mining Claim is situated in a rough country, at a high altitude; that the surface is covered in part with large trees and thickets of brush and undergrowth; that the yearly snow-fall in the winter is very great; that none of the original marks and boundaries of said Conkling Lode Mining Claim referred to in said patent are now standing; that the original place where the respective corners were marked if marked at all, is now only a matter of speculation. That the defendant herein has upwards of forty (40) miles of underground workings, as your orator is informed and believes, which have been made by it and the companies which it succeeded, as hereinbefore alleged, and thereby it has

and they were enabled to secretly explore and determine the course, strike and dip of the mineral bearing veins and lodes, including the territory wherein the said Conkling Lode Mining Claim is situated; and with such knowledge and information, so gained, the said defendant and the said parties to which it succeeded as aforesaid have, as your grantor is informed and believes, since shortly discovering said ore deposits, been secretly scheming and designing ways and means, by the methods hereinafter alleged and otherwise, to attempt to secure to the defendant exclusively, the said southwest 135.5 feet of said Conkling Lode Mining Claim, as described in said patent and herein, without informing your grantor of its proceedings in interest, as tenants-in-common in said Conkling Lode Mining Claim as hereinafter alleged, of any of its aforesaid secret acts, doings or intentions, thereby leaving your grantor, at the late date, entirely helpless in the premises to meet the combination now made by said defendant in reference to the boundaries of said Conkling Lode Mining Claim being other than as described in said patent and herein.

XIX.

And your grantor further shows and alleges that the said defendant's duty, as tenants-in-common with your grantor and its said predecessors in interest in said Conkling Mining Claim, was and is to protect the entire extent and area of said claim, as described in the patent thereof, and secure, if possible so to do, the entire area thereof, as described in said patent, and not to destroy or defeat the same in any manner or to any extent whatsoever, nor acquire or attempt to acquire any adverse interests in and to the ground as bounded and described in said patent and herein, or in or to the mineral stream contained within planes bounded by the boundaries of said Conkling and Arthur Lode Mining Claims, as described in said patent and herein, extended downward vertically.

That neither the Government of the United States nor any third party, or party not interested in said Conkling Lode Mining Claim, as patented and described in the patent, does now dispute or contest, or ever has disputed or contested to the best of your grantor's knowledge, information and belief, the entire boundaries of said Conkling Lode Mining Claim as described in the patent and in the Amended Bill of Complaint herein.

In Consideration Whereof and forasmuch, as your grantor has no sufficient remedy at law for the wrongs done and threatened to be done, and that the remedy at law is inadequate and can afford no protection to your grantor against the unlawful and wrongful claims and assertions of said defendant, and the wrongs done and threatened to be done for the reasons hereinafter stated, and is only adequate in a court of equity where matters of this kind are properly cognizable and reviewable.

Your grantor to the end that it may obtain the relief to which it is justly entitled in the premises, Prays:

First. That the defendant show, if it can, why your orator should not have the relief prayed, and make full disclosure and discovery of all the matters aforesaid, and, according to the best and utmost of its remembrance, knowledge, information and belief, full
80 true, direct and perfect answer make to the matters hereinbefore stated and charged, but not under oath, answer under oath being expressly waived.

Second. That the defendant be required to set forth any and every adverse interest, claim or demand in and to the said above described premises as herein specifically bounded and described, and to the ores and minerals therein contained, to the end that the same may be justly adjudicated and declared null and void as against your orator, except only as to an undivided one-fourth ($\frac{1}{4}$) interest therein as tenant in common with your orator; and that the title and ownership of your orator to an undivided three-fourths ($\frac{3}{4}$) interest in said Conkling and Arthur Lode Mining Claims, as specifically hereinbefore described, and to the ores and minerals contained therein vertically beneath the surface boundaries thereof as hereinbefore described, be established and confirmed as against any and all claims of the said defendant, and all cloud thereon forever removed.

Third. That an accounting be taken by and under the direction and decree of this Honorable Court, and the amount, quality and value of the ores and minerals removed by said defendant company from said premises described as aforesaid be ascertained and determined; and that, upon such accounting being had and the value of such ores ascertained and determined, your orator may be decreed to be the owner of three-fourths ($\frac{3}{4}$) of the sum so ascertained, and that the said defendant company be required to pay the same to your orator.

Fourth. That your honors grant unto your orator your Writ of Injunction, commanding the said defendant, its servants, agents and employees, and all persons under its authority, direction or control, until the final determination of this action, to absolutely desist and refrain from entering into or upon any portion of said Conkling and Arthur Lode Mining Claims as hereinbefore described, or either of them, and from working in or upon said premises or beneath the surface thereof, or taking any ores or minerals therefrom at any point upon or beneath the surface of said premises herein described extended down vertically; or, that your Honors in lieu of an injunction as prayed for, appoint a receiver herein pending the final determination of this action, and that such receiver be empowered and authorized to enter into the joint or common possession of said Conkling and Arthur Lode Mining Claims, as they are bounded and described in this Amended Bill of Complaint with the
81 defendant company, and said receiver and said defendant company continue the further mining and disposing of the ores now developed and that may hereafter be found and developed lying underneath the surface of said Conkling and Arthur Lode Mining Claims, and confined between the vertical planes drawn down

through the exterior boundaries of said mining claims as herein-before described under such suitable provisions as your Honors may deem best.

Fifth. That the said defendant be adjudged and decreed to have purchased and to hold the said Custer No. 2 and Silver Hill No. 4 Mining Claims in trust for your orator and said defendant as tenants-in-common in said Conkling and Arthur Lode Mining Claims according to the respective shares, viz., an undivided three-fourths ($\frac{3}{4}$) interest for your orator and an undivided one-fourth ($\frac{1}{4}$) interest for said defendant.

And For Such Other and Further Relief as the equity of the case may require, and as to your Honors may seem meet, and for its costs of suit in this behalf wrongfully expended.

CHARLES C. DEY,
A. L. HOPPAUGH,
Solicitors for Complainant.

UNITED STATES OF AMERICA,
District of Utah,
County of Salt Lake, ss:

I, Leonard Burch, being first duly sworn, deposes and says: That he is an officer of the Complainant herein, Conkling Mining Company, to-wit, the Treasurer thereof; that he has read the above and foregoing Amended Bill of Complaint, and knows the contents thereof; that the same is true of his own knowledge, except as to matters therein stated upon information and belief, and as to those matters he believes it to be true.

J. LEONARD BURCH.

Subscribed and sworn to before me, this 29th day of June, A. D. 1909.

[SEAL.]

G. W. PARKS,
Notary Public.

My commission expires Jany. 4, 1910.

Amended Bill Filed July 5, 1909.

JERROLD R. LETCHER,
Clerk.

82 (*Amended Answer to Amended Bill of Complaint.*)

Comes now the defendant above named, Silver King Coalition Mines Company, and by leave of the court first had and obtained, files this its amended answer to the amended bill of complaint of complainant above named:

This defendant, now and at all times hereafter, saving to itself all and all manner of benefit of exception or otherwise that can or may be had or taken to the many errors, uncertainties and imperfections in the said amended bill contained, for answer thereto, or to so much

thereof as this defendant is advised it is material or necessary for it to make answer to, answering says:

This defendant admits that on or about the 17th day of September, A. D. 1908, Nicholas Treweek and J. Leonard Burch, the original complainants herein, caused the complainant to be incorporated under the laws of the State of Utah, and did thereupon convey to said complainant corporation all of their right, title and interest in and to the Conkling Lode Mining Claim, patented as U. S. Lot No. 689, and the Arthur Lode Mining Claim, patented as U. S. Lot 690, situated in the Uintah Mining District, County of Summit, State of Utah, and did also assign and transfer to said complainant corporation all manner of actions, causes of action, suits, demands, controversy and accounting of every kind and nature whatever in favor of said Treweek and Burch and against the defendant herein, but as to whether or not the capital stock of said complainant corporation was paid for upon the incorporation of said company by the conveyance of said above named mining claim, or any interests therein, and by the assignment mentioned in said complaint, this defendant has no knowledge or information thereof, and leaves said complainant to make such proof thereof as it may be advised.

This defendant admits that it is a corporation, organized and incorporated under the laws of the State of Nevada, on or about the month of May, 1907, but denies that it was so organized for the purpose of taking over the Kearns-Keith Mining Company or the Silver King Mining Company respectively, corporations.

This defendant admits that it succeeded to the interest theretofore owned by said Kearns-Keith Mining Company in and to the Arthur and Conkling Lode Mining Claims, and that such interest was an undivided one-fourth interest therein.

83 Admits that on the 22nd day of September, 1903, the said Kearns-Keith Mining Company was the owner of said undivided one-fourth interest in and to said Conkling and Arthur lode mining claims and from thence continued to be the owner thereof until said Kearns-Keith Mining Company conveyed and transferred said interest to the defendant above named which said conveyance or transfer was made on, to wit, the 31st day of May, A. D. 1907, and not on the 29th day of May, 1907.

That as to whether or not one Nicholas Treweek was the owner of an undivided one-half interest in and to each of said Conkling and Arthur Lode Mining Claims, during all or any of the times that said Kearns-Keith Mining Company was the owner of an undivided one-fourth interest therein, this defendant has no knowledge or information thereof, and leaves said complainant to make such proof thereof as it may be advised; and as to whether the said Treweek, upon the transfer by said Kearns-Keith Mining Company to the defendant herein was the owner of an undivided one-half interest in said mining claims and each of them and from thence continued to be the owner of such interest in common until the transfer by him to the complainant herein this defendant has no knowledge or information thereof, and leaves said complainant to make such proof as it may be advised.

That as to whether or not the said J. Leonard Burch was the owner, on or about the 16th day of May, 1906, or ever was, at any other time, the owner of an undivided one-fourth interest in and to said Conkling and Arthur Lode Mining Claims, and that from thence as such owner he became or was the tenant in common with said Kearns-Keith Mining Company in said mining claims, or either of them, until the transfer by said Kearns-Keith Mining Company of its interest in and to said claims to the defendant herein, and that since the time of said transfer he ever was a tenant in common with the defendant herein, to said claims, or either of them, until he transferred his interest to the complainant herein, this defendant has no knowledge or information thereof, and therefore leaves said complainant to make such proof thereof as it may be advised.

This defendant admits that on or about the 23rd day of February 1892, the United States of America, by its letters patent, granted unto the Boss Mining Company, a corporation, those certain premises called the Conkling and Arthur Lode Mining Claims respectively,

situated in the Uintah Mining District, County of Summit,
84 State of Utah, and that in said patent said Conkling Lode

Mining Claim was particularly bounded and described as in the 5th paragraph of said amended bill of complaint set forth, and that in and by the terms of said patent the said Arthur Lode Mining Claim is particularly bounded and described as set forth in said 5th paragraph of said amended complaint, but this defendant alleges that the description and boundaries of said claims as set forth in said fifth paragraph of said amended bill of complaint, are not a true or correct description of either of said mining claims as the same are bounded and described and limited upon the ground by the permanent monuments, objects and bearing trees found upon the ground, and alleges that the said Conkling Lode Mining Claim, U. S. Lot No. 689, and the Arthur Lode Mining Claim, U. S. Lot No. 690, as the same are actually found upon the ground, are particularly described and bounded as follows, to wit:

Commencing at corner No. 2, the northeast corner of the Conkling Claim and the northwest corner of the Arthur claim, a common corner of said Conkling and Arthur Claims, from which U. S. Mineral Monument No. 4 bears North 32 deg. 52. Min. west 939.3 feet distant, thence from said corner south 61 deg. 21 min.; west 1364.5 feet to Corner No. 3, the northwest corner of said Conkling Claim, thence South 21 deg. 09 min. East 600 feet to corner No. 4, the southwest corner of said Conkling claim, thence North 61 deg. 21 min. East 1364.5 feet to corner No. 1, the southeast corner of said Conkling Claim, and also corner No. 1, and the southwest corner of said Arthur claim, and thence North 76 deg. 57 min. East 951.8 feet to corner No. 4 the southeast corner of the Arthur Claim, thence North 21 deg. 09 min. West 600 feet to corner No. 3, the northeast corner of said Arthur Claim, and thence south 76 deg. 57 min. west 951 feet to said corner No. 2, the northwest corner of said Arthur Claim and the place of commencement of surface bounds. The line of division between said mining claims runs North 21 deg. and 9 min. West from said common corner No. 1 to said common corner No. 2.

This defendant admits that beneath the surface and within the exterior boundaries, extended downward vertically, of each of said mining claims, there is a lode or vein of rock in place, bearing silver, lead and other valuable minerals, which, on its course or strike, extends throughout the length of said claims; and admits that said mining claims and each of them are valuable only for the
85 ores and minerals therein contained, but this defendant alleges that no part or portion of the top or apex of the said lode or vein of rock in place, found beneath the surface of the said mining claims, as above admitted, is found anywhere within the exterior boundaries, extended downward vertically, of said claims, or either of them, but that the top or apex of said lode or vein, and the whole thereof, is found and contained within the surface boundaries, extended [downward] vertically, of certain other mining claims, owned and possessed by this defendant, as hereinafter in this answer more particularly alleged and described, which said other claims, lie northerly from said Conkling and said Arthur Mining Claims.

This defendant denies that ever since the incorporation of this defendant, it has been, or still is, or ever was, in the possession of the vein or lode described in the amended complaint herein, as within or beneath the boundaries of either the said Conkling or Arthur Lode Mining Claims, or all or any of the ores or minerals therein except as hereinafter alleged; and denies that it is, or has been, since the incorporation of said defendant, working or developing any vein or lode within the boundaries of said Conkling and Arthur Lode Mining Claims, extended downward vertically, or is, or ever has been, extracting any ores or minerals therefrom, except that from the vein or lode so apexing as aforesaid in other mining claims owned by this defendant it extracted from beneath the surface of the said Conkling Lode Mining Claim, not to exceed 990 tons of ore, of all grades or classes. And this defendant alleges that the value of all the ore hitherto mined by this defendant from within the surface boundaries, extended downward vertically, of the said Conkling Mining claim, after deducting therefrom the reasonable and necessary cost and expense of mining and disposing of said ores, does not exceed the sum of \$20,047.50. And this defendant further alleges that the reasonable and necessary cost and expense incurred by it in the discovery and development of all ores hitherto mined or removed by it from within the exterior boundaries, extended downward vertically, of the said Conkling Mining Claim, exceeds the sum of \$72,500. And this defendant further alleges that it has not, at any time hitherto, mined or extracted any ores whatever from within the exterior boundaries, extended downward vertically, of the said Arthur Lode Mining Claim. And this defendant denies that the said Kearns-Keith Mining Company, ever, at any time, was in possession of said
86 vein or lode, or all or any of the ores or minerals therein, within or beneath the surface of either the said Conkling or the Arthur Lode Mining Claims, and denies that it ever was working or developing the same, or extracting any ores or minerals therefrom whatever.

This defendant admits that it and said Kearns-Keith Mining Company gained access to said mining claims, beneath the surface thereof, and within the exterior boundaries thereof extended downward vertically, by means of certain underground work situated upon other property, then and now owned by this defendant and its predecessors in interest; but this defendant denies that said complainant is, or that it has been, or that any of its predecessors in interest have been excluded by this defendant from access to any of of the workings of this defendant, on or beneath the surface of either the said Conkling or the said Arthur Mining Claims. And this defendant denies that it has, since its incorporation, or that said Kearns-Keith Mining Company, grantor of said defendant, has extracted large or any [quantities] of ore from said Conkling or said Arthur Lode Mining Claims, except as hereinbefore admitted; and denies that the ores so extracted by said defendant from beneath the surface of said Conkling Mining Claim as hereinbefore admitted exceed the sum of one million dollars, or any other sum whatever, except \$20,047.50; and this defendant alleges, as it has hereinbefore alleged, that the reasonable and necessary cost and expense incurred by it in the discovery and development of all said ores, so heretofore mined by it from within the exterior boundaries extended downward vertically, of the said Conkling Claim, exceeds the sum of \$72,500. And this defendant denies that the grantors of said complainant, prior to the commencement of this action, did demand from said defendant, that it account to them, as tenants in common, with it of said mining claims, of the ores and minerals by it and its grantors removed from said premises and disposed of, or for their just and proper share or value thereof; but admits that said complainant and its predecessors did demand that said defendant account to them for ores and minerals taken and removed by said defendant from property and premises in which neither said complainant nor any of its predecessors in interest ever at any time, had any estate, right, title or interest, whatever. And this defendant admits that after the incorporation of said complainant and after it succeeded to the rights and interests of said Nicholas Treweek and J. Leonard Burch in and to the said Conkling and Arthur Mining Claims, it did, on or about the 30th day of November, 1907, demand an accounting by 87 this defendant for the value of the ores mined by it from beneath the surface of the said Conkling Mining Claim.

Admits that said defendant company has entirely ignored said demand and refused and neglected to make answer thereto, and refused to account to said complainant for the value of the ores by it mined or removed from beneath the surface of said Conkling Lode Mining Claim, and this defendant alleges that it was not, at said time, and never has been, obligated to account to said complainant, or any of its predecessors in interest for any ores mined or extracted by it from beneath the surface of the said Conkling Lode Mining Claim, or any other mining claim then owned, held or possessed by said complainant, or any of its predecessors, in interest.

This defendant admits that it asserts, pretends and claims

an exclusive interest, not as tenant in common with the complainant herein, in and to the southwest 135.5 feet of the premises attempted to be described in said amended complaint as a part and portion of the said Conkling Lode Mining Claim, adverse to said complainant, and admits that it claims and asserts that it has the exclusive right and ownership of all the ores contained therein, within planes extended downward vertically from the lines described in the tenth paragraph of said amended bill of complaint, and admits that said defendant has given out in speech and otherwise that it has the exclusive right to enter in and upon said premises and remove therefrom without accounting to said complainant as tenant in common with it, as aforesaid, or otherwise, because of its ownership of the said premises in which said ores and minerals are contained; and admits that it asserts that the boundaries of the said Conkling Mining Claim, as described in said amended complaint herein, are not the proper boundaries thereof, to the extent of including the said 135.5 feet, alleged by said complainant to be embraced within the boundaries of said Conkling Mining Claim; but this defendant denies that any part or portion of said 135.5 feet, so owned by this defendant as aforesaid, belongs to or is embraced within the said Conkling Lode Mining Claim, and denies that the Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, mentioned in said tenth paragraph of said complaint, so far as said 135.5 feet are concerned, overlap or conflict at all with said Conkling Lode Mining Claims, and this defendant denies that its claims and pretensions as to the ownership of said 135.5 feet are false or untrue or unfounded in fact; and denies that by reason of any of the facts alleged in said amended bill of complaint, said defendant ought not

88 to be permitted to vary the location or boundaries of the said Conkling Lode Mining Claim, upon the ground, as the same are described in said amended bill of complaint, or to assert an interest adverse to said complainant in and to said 135.5 feet; and denies that said defendant should be held as trustee of the title of any part or portion of said Custer No. 2 or the Silver Hill No. 4 Lode Mining claims for the benefit of said complainant, as a tenant in common with said defendant or otherwise, or at all.

This defendant denies that the description of the location of said Conkling Mining Claim, as described in said amended bill, is the same or identical description, as described in the patent and as patented, and on the contrary this defendant alleges that the true description of said Conkling Lode Mining Claim, is as appears from the patent and the field notes, which are a part thereof, and the return of the surveyor making the said survey of the said Conkling Lode Mining Claim; that a true and correct description of said Conkling Lode Mining Claim is as hereinbefore in this answer set forth; and this defendant denies that in and by the description contained in said amended bill of complaint, the location of the boundaries of said Conkling Lode Mining Claim, can be readily or at all traced, ascertained or determined upon the ground, and denies that said or any alleged tracing, from the description set forth in said

amended complaint of said Conkling Lode Mining Claim, at all or any of the times mentioned in said Amended bill of complaint, was well or at all known to said Kearns Keith Mining Company, or to this defendant, or to any other person or persons whomsoever, and this defendant admits that ever since said Conkling Mining Claim was patented, the owners of said claim have never had any disputes or contention over, or disturbance of their ownership or right of possession of said Conkling Lode Mining Claim, as the same is located upon the ground; but denies that the said Conkling Lode Mining Claim is or can be located upon the ground as the same is described in said amended complaint herein, and alleges that said Conkling Lode Mining Claim, as the same exists upon the ground, as determined by the monuments, permanent objects and bearing-trees called for in the field notes of the survey of said claim, embraces the premises and none others, as the same are described hereinbefore in this answer, and do not include any part or portion of said 135.5 feet, claimed by the complainant herein, and that the said premises as described herein, exclusive of said 135.5 feet, are the premises had and held by this defendant

89 and its predecessors in interest and the other owners of said claim, as tenants in common with this defendant and its predecessors in interest, without dispute or contention, and that no contention as to the locus of said Conkling Lode Mining Claim was ever at any time made or communicated to this defendant, or any of its predecessors in interest, until the filing of the complaint in this action and the alleged description thereof, as set forth in said complaint, and denies that this defendant has been guilty of any wrongful acts or conduct whatever, or that its grantor and predecessor in interest, Kearns Keith Mining Company, has been guilty of any wrongful act or conduct whatever. And this defendant denies that it or its predecessor in interest, the Kearns Keith Mining Company, or any other person whomsoever, at any time whatever, either before or after the 22nd day of September, 1903, extended secretly the Alliance Tunnel, or any other workings through or underneath the Conkling Lode Mining Claim, as alleged in said complaint or otherwise, or that they, or either of them, secretly drove any cross-cut or other working from said Alliance Tunnel, or otherwise, to or near the southwest corner of said Conkling Lode Mining Claim, as the same is described in said patent, or in said amended complaint.

This defendant admits that the openings underneath the surface and within the boundary planes of the Conkling Lode Mining Claim, extended downward vertically, can be entered through the main shaft of the Silver King Mining Company, and from the levels and drifts therefrom, or through said Alliance Tunnel, and that said shaft, drifts, levels and said Alliance Tunnel are under the exclusive control and ownership of the defendant, and were under the exclusive ownership and control of the said Silver King Mining Company, with the reserved right in said Thomas Kearns, as alleged in said amended complaint, until the incorporation of the Kearns Keith Mining Company. And this defendant denies that in drift-

ing and extending the crosscut from said Alliance Tunnel, and prior to conveyance by said said Kearns Keith Mining Company, the said Kearns Keith Mining Company secretly discovered or explored a large or any valuable ore deposit. And denies that this defendant, or its said grantor, have made extensive or any stoping, or secretly removed from any part or portion of said Conkling Lode Mining Claim, ore of the value of \$1,000,000, or any other sum, except the sum of \$20,047.50, as hereinbefore in this answer alleged.

And this defendant denies that the description of the said Conkling Lode Mining Claim, as asserted and claimed by this defendant herein, is such that it is within the boundary planes of the
90 said Conklin Lode Mining Claim, as alleged to be described in the patent thereof, extended downward vertically, and denies that the 135.5 feet, claimed by said complainant in said amended bill of complaint to be part and parcel of said Conkling Lode Mining Claim is any part or portion thereof, or belongs thereto, or that said complainant, or any of its predecessors in interest, have any estate, right, title or interest in or to any part or portion of said 135.5 feet, or in or to any part or portion of the ores or minerals therein contained, vertically beneath the surface thereof. And this defendant denies that the value of the ores found or discovered within the planes extended downward vertically of said 135.5 foot strip is not less than the sum of \$2,500,000, or of any greater value than the sum of \$52,681.00. And this defendant denies that all or any of the underground work or discovery of ore, or removal of ore, by it, was intentionally or wrongfully or at all kept secret by this defendant, or its predecessors in interest from said complainant, or any of its predecessors in interest, Nicholas Treweek or J. Leonard Burch, or any other person. And this defendant alleges that as to what suspicions the predecessors in interest of said complainant had, this defendant has no knowledge or information thereof, and leaves said complainant to make proof as it may be advised. And this defendant denies that it refused permission to said predecessors in interest of said complainant to inspect the underground workings beneath the surface of the said Conkling and Arthur Mining Claims, and this defendant admits that on or about the month of December, 1907, the said Nicholas Treweek and J. Leonard Burch, demanded of this defendant an accounting for the proceeds of any or all ores taken from said Conkling and Arthur Lode Mining Claims, but this defendant denies that this defendant expressed great or any surprise at any demand which said Treweek or said Burch might make upon it for ores mined by it from its property, and admits that it informed the said Treweek and Burch that it had spent a great deal of money in exploration and claimed the right to remove and extract sufficient ore to repay it for the money expended in such explorations before said Nicholas Treweek and said J. Leonard Burch, or either of them, would be entitled to have or receive, as tenants in common with said defendant, any accounting whatever from said defendant.

This defendant denies that the said Kearns Keith Mining Company at any time after the discovery of ore, as alleged in the thir-

teenth paragraph of said amended bill of complaint, otherwise, or at all, made or caused to be made cunning or any efforts to purchase the interest in said mining claims owned by said Treweek and said Burch, or either of them, or that said Kearns Keith Mining Company, or anyone on its behalf, represented that said interests were of no special value, or that they offered to pay for said interests the sum of \$15,000 and on more; but this defendant alleges that it is a fact that the interest of said Treweek and said Burch at said time, and of said complainant in and to said Conkling and Arthur Lode Mining Claims, was at said time, and is now of no great value, for the reason that there has been discovered in and beneath the surface of said mining claims no ores of any especial or great value, and that the ores which have been discovered therein belong to and are part and parcel of a vein or lode having its apex in mining ground and premises, owned, held and possessed by this defendant, since its incorporation, and prior thereto, by its predecessors in interest, as hereinafter particularly set forth and alleged, and as to when the said Treweek and the said Burch first had any suspicion, as alleged in the 13th paragraph of said complaint, this defendant has no knowledge or information, and therefore leaves the said complainant to make such proof thereof as it may be advised.

This defendant, answering paragraph numbered 14 of said amended bill of complaint, denies that after any failure whatever, at any time whatever, to purchase any interest of said Treweek and Burch, or either of them, in said Conkling and Arthur Lode Mining Claims, as alleged in said amended bill of complaint, or otherwise, or at all, the said Kearns Keith Mining Company, did, during the month of April, 1907, or at any other time, or at all, purchase from the Belmont Mining Company, a corporation, for the consideration named in said amended complaint, or any other consideration whatever, the Custer No. 2 and the Silver Hill No. 4 Lode Mining Claims, or either of them, then owned by said Belmont Mining Company, or took a conveyance for the same, or either of them, in the name of Thomas Kearns, trustee, or any other person whosoever, and denies that upon the incorporation of this defendant, the said Thomas Kearns, as trustee, wrongfully conveyed the said mining claims, or either of them, exclusively, to the defendant herein, and to the contrary this defendant alleges that on or about, to-wit: The 6th day of April, 1907, the said Thomas Kearns, individually, and for and on his own behalf, took and received an assignment of an option theretofore given and granted by the Belmont Mining Company to one D. P. Rohlfing, to purchase the said Custer No. 2 and the said Silver Hill No. 4 Lode Mining Claims; that thereafter and on or about the 10th day of April, 1907, the said Thomas Kearns did offer to the Silver King Mining Company, a corporation, to assign and transfer to it the said option to purchase, so as aforesaid assigned to him, and on, to-wit: the said 10th day of April, 1907, the said Silver King Mining Company did duly accept the offer of the said Thomas Kearns, and did thereupon pay to the said Belmont Mining Company, the portion of the con-

sideration to be paid to it, pursuant to the terms of said option, and did thereupon direct that the deed from said Belmont Mining Company should be taken in the name of said Thomas Kearns, as trustee for said Silver King Mining Company, to be conveyed by him to the nominee of said Silver King Mining Company; that on, to-wit, the 12th day of April, 1907, the said Belmont Mining Company did execute a deed of conveyance to said Custer No. 2 and Silver Hill No. 4 Lode Mining Claim, conveying the said claims and each of them unto the said Thomas Kearns, trustee, and that thereafter and upon the incorporation and organization of this defendant, and on, to-wit, the — day of June, 1907, at the request and pursuant to the agreement entered into by and between the said Thomas Kearns and the said Silver King Mining Company, the said Thomas Kearns did convey the said Custer No. 2 and the said Silver Hill No. 4 Lode Mining Claims to this defendant, and that on said day this defendant did complete the purchase of said mining claims and each of them, by paying the balance of the purchase price then due thereon to the said Belmont Mining Company; that at no time whatever did said Kearns Keith Mining Company acquire, have, hold or possess any estate, right, title or interest, of, in or to the said Custer No. 2 and the said Silver Hill No. 4 Lode Mining Claims, or either of them, or in or to any part or portion of either of them; that no part of the purchase price of said mining claims, or either of them, was paid or discharged by said Kearns Keith Mining Company, or anyone on its behalf, but that the title to said mining claims was purchased and paid for by said Silver King Mining Company and this defendant, as aforesaid, for the sole use and benefit of said Silver King Mining Company and this defendant admits that the said Custer No. 2 and said Silver Hill No. 4 Lode Mining Claims were by letters patent of the United States, dated June 2nd, 1904, granted to the Belmont Mining Company, and admits that said patent was based upon location notices antedating the location of said Conkling Lode Mining Claim; and this defendant denies that the said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims overlap or include any part or portion of the area of the said Conkling Lode Mining Claim, included within the said 135.5 foot strip thereof, as set forth and described in said amended complaint, and wrongfully claimed by said complainant to be part and

93 parcel of the said Conkling Lode Mining Claim; and denies that any part or portion of said 135.5 foot strip is embraced within or described or forms any part or portion of the said Conkling Lode Mining Claim.

This defendant denies that at all or any of the times mentioned in said amended bill of complaint, or while the said Treweek and Burch and the said Kearns Keith Mining Company were tenants in common in said Arthur and Conkling Lode Mining Claims, that either the said Kearns Keith Mining Company, or the said Treweek or Burch were, as tenants in common, as alleged in said amended bill of complaint, or otherwise, or at all, in the actual, constructive or any possession whatever of any part or portion of the said 135.5 foot strip of the said Conkling Lode Mining Claim, as set forth and

alleged in said amended bill of complaint, or otherwise; and denies that the purchase by the said Thomas Kearns and this defendant and said Silver King Mining Company, as hereinbefore alleged, of said Custer No. 2 and said Silver Hill No. 4 Lode Mining Claims, or either of them, from said Belmont Mining Company, was at all made while said Kearns Keith Mining Company, or said Treweek or said Burch as tenants in common of said Arthur and Conkling Lode Mining Claims, or either of them, were in the possession of any part or portion of the said 135.5 foot strip, mentioned in said amended complaint, or otherwise, and denies, as it has heretofore denied, that said Kearns Keith Mining Company and said Treweek and said Burch were tenants in common or any part or portion of said 135.5 foot strip or that any part or portion of said 135.5 foot strip ever was, at any time, part or parcel of the said Conkling Lode Mining Claim; and this defendant denies that at the time of the purchase by said Thomas Kearns, trustee, of said Custer No. 2 and said Silver Hill No. 4, Lode Mining Claims, that any ore bodies whatever had been found or discovered within any part or portion of said 135.5 foot strip, and alleges that no ore was developed or found within said 135.5 foot strip until long after the purchase of said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, and the conveyance thereof to this defendant, as hereinbefore alleged, and denies, as it has hereinbefore denied, that said Kearns Keith Mining Company and said Treweek and said Burch ever were, at any time whatever, tenants in common, the one with the other, in or to any part or portion of said 135.5 foot strip, or in or to any of the ores or ore bodies therein contained, and this defendant denies, as it has hereinbefore denied, that said Kearns-Keith Mining Company, ever

94 at any time whatever, purchased said Custer No. 2 or said Silver Hill No. 4 Lode Mining Claim, and admits that neither this defendant, nor any of its grantors, held or claimed any right or interest in or to any part or portion of said 135.5 foot strip until the purchase and conveyance to this defendant of the same, as part and parcel of said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, as hereinbefore alleged; but this defendant denies that this defendant and its grantors and predecessors in interest did not have any right, title or ownership in or to the lodes or veins in said Conkling Lode Mining Claim, as hereinbefore in this answer described, and in and to the ores and veins in said 135.5 foot strip aforesaid, part and parcel of said Custer No. 2 and said Silver Hill No. 4 Lode Mining Claim; and on the contrary this defendant alleges that it and its predecessors in interest, at all times alleged that it and its predecessors in interest, at all times alleged and claimed that it and its predecessors in interest were the owners of and entitled to all the ore bodies, veins and lodes in and beneath the surface of the said Conkling Lode Mining Claim and the said Arthur Lode Mining Claim and said 135.5 foot strip, by reason of its and its predecessors in interest, ownership of the apex of the veins or lodes in which such ore bodies are found, as hereinafter in this answer specifically set forth and alleged. And this defendant denies that either it, or any of its predecessors in interest, have been, at any time whatever, or now is,

a tenant in common with said plaintiff or any of its predecessors in interest of, in or to any part or portion of said 135.5 foot strip, or any of the ores found or contained therein. And this defendant admits that said Kearns-Keith Mining Company never made any independent claim, or any claim whatever, to any part or portion of said 135.5 foot strip, or any of the ores or minerals therein contained; but this defendant denies that it and its predecessors in interest made no independent or other claim adverse to said complainant, or any of its predecessors in interest, in or to said 135.5 foot strip, or any part thereof, until the 11th day of April, 1906, and on the contrary this defendant alleges that it and its predecessors in interest have at all times since procuring the title to said Carter No. 2 and Silver Hill No. 4 Lode Mining Claims, as aforesaid, claimed and asserted title, adverse to all the world, in and to said 135.5 foot strip, and to all the ores and minerals, veins and lodes therein contained. And this defendant denies that it has made any such extension whatever of the said Alliance Tunnel, as set forth in said amended bill of complaint, or otherwise, and denies that it or any of its

95 grantors or predecessors in interest, carried on any work in said Alliance Tunnel, or otherwise, as tenants in common with said complainant, or any of its predecessors in title or interest, or for the discovery or development of any ore within the exterior boundaries, extended downward vertically, of said Conklings Mining Claim, or claimed of or from its co-tenants any payment or reimbursement whatever out of any ores developed in said Conklings Mining Claim, for the cost or expense incurred in said work; and this defendant denies that while carrying on any work whatever, as tenant in common with said complainant, or any of its predecessors in interest, or while claiming to be carrying on any work whatever for the development of any properties held or claimed in common by them, or either of them, or while claiming any reimbursement whatever by reason of such co-tenancy, or otherwise, or at all, out of any ores within said Conklings Mining Claim, for the cost or expense of extending said tunnel, or otherwise, said defendant's grantor, Kearns-Keith Mining Company, or any other person or corporation whatever secretly at all discovered any ore body whatever within said 135.5 foot strip, or fraudulently or otherwise, contriving to deprive any of its co-tenants of their just or any proportion of the value of any ore, or contriving or intending to secure to this defendant's grantor, the benefit of the whole or any part thereof, the said Kearns-Keith Mining Company secretly, without informing said complainant's predecessors in title of the discovery of any ore, or otherwise, or at all, purchased said Carter No. 2 or said Silver Hill No. 4 Lode Mining Claims, or either of them, or thereafter, or at all, held the same secretly or otherwise, or after developing the said ground and fully ascertaining the extent of said ore bodies, or the value of the ore contained therein, or otherwise, or at all, for the first or any time made known to said complainant's predecessors in title that the said Kearns-Keith Mining Company claimed adversely or otherwise, said 135.5 foot strip, or for the first time or at all, pretended or claimed that said 135.5 foot strip was not within the boundaries or plume of said

Conkling Lode Mining Claim. And on the contrary the defendant alleges that at no time whatever did said Koonce-Koth Mining Company have any claim, right, title, or interest whatever in or to said 185.5 foot strip, and that at no time whatever was found or developed in said 185.5 foot strip, until long after the purchase and conveyance to this defendant by said Koonce. Hence, of said Cases No. 1 and Silver Hill No. 1 Lode Mining Claim, as heretofore alleged, that the defendant denies that said Koonce-Koth Mining Company ever, at any time whatever, secured title to said Cases No. 1 or

20 said Silver Hill No. 1 Mining Claim. And denies that it ever was in possession of any part or portion of the said 185.5 foot strip. And denies that said Koonce-Koth Mining Company ever made any claim whatever to said 185.5 foot strip, or any part thereof, as any part or portion of said Conkling Lode Mining Claim. And denies that said Koonce-Koth Mining Company ever discovered or invented by any adverse claim or existing relations to anyone and complainant, or its predecessors or title, of any ore discovered in or beneath the surface of said 185.5 foot strip, and denies that any ore was discovered in said 185.5 foot strip by said Koonce-Koth Mining Company, or by any other person or corporation than the defendant, as heretofore as fact, and alleged. And the defendant denies that the claims and contents of the affidavits that the boundaries of said Conkling Lode Mining Claim, as the same are set forth in said amended bill of complaint, and in the patent to said Conkling Lode Mining Claim, without reference to the field notes of the survey of said claim (which form said bill of complaint) are not in true boundaries, and that the said 185.5 foot strip is said amended complaint mentioned therein and be included in the said Conkling Lode Mining Claim, when located upon the ground, constituted or was the true notice that said Breck and said Birch, or either — [them] them, ever had that any such claim or interest existed from any source whatever. And on the contrary the defendant alleges that at all times, past and present, and said Breck and said Birch, have had full and complete notice that the said 185.5 foot strip was no part or parcel of the said Conkling Lode Mining Claim, as the same was located upon the ground, and never at any time made any claim or contention that the said strip was any part or portion of said Conkling Lode Mining Claim until just prior to the commencement of this suit.

Answering paragraph numbered 17 of said amended bill of complaint, the defendant admits that the said Breck and Birch did ascertain the actual facts and the whole thereof with respect to the underground works beneath the surface boundaries of the said Conkling Lode Mining Claim, and the character and extent of the ore developed therein, and still ascertain the fact to be that the said portion of the ore and minerals found and developed in the said 185.5 foot strip belonged to or was beneath any part or portion of the said Conkling Lode Mining Claim, and did ascertain the fact that all of the ore and minerals contained in said 185.5 foot strip, was outside of and beyond the eastern boundaries of said Conkling Lode Mining Claim.

97 Answering paragraph numbered 16 of said amended bill of complaint, this defendant denies each and every allegation therein contained.

This defendant admits that the said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims were purchased by this defendant without the knowledge, acquiescence or consent of said Treweek or Burch, or either of them, but denies that such purchase was made for the purpose, or with the intention of defrauding said Treweek or Burch, or said complainant in any way whatever, as tenants in common with this defendant, or its grantor, the Kearns-Keith Mining Company or either said Conkling or said Arthur Lode Mining Claim, or out of their just or proper rights in the premises, or otherwise, or in or to any part or portion of said Conkling Lode Mining Claim, wherein any ores or minerals whatever of any value whatever, have been found or discovered. And denies that this defendant has made any attempt whatever to describe or locate the said Conkling Lode Mining Claim, so as to exclude said 135.5 foot strip therefrom, or has located or attempted to locate said Conkling Lode Mining Claim, otherwise than in accordance with the actual facts, and as said claim appears upon the ground, from the permanent monuments, posts, ties and bearing-trees thereof. And this defendant denies that it has done, or caused to be done any act or thing, with any intention or purpose to defraud said complainant, or any of its grantors or predecessors in interest, in any manner whatever, and this defendant admits that neither this defendant, nor said Kearns-Keith Mining Company ever notified the said Treweek or the said Burch, or said complainant of the purchase by this defendant of said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, or permitted them, or either of them, to participate in such purchase; and denies that either this defendant or any of its grantors or predecessors in interest was under any obligation or duty whatever to notify either the said Burch or said Treweek or said complainant of any sale or purchase whatever of said Custer No. 2 or said Silver Hill No. 4 Lode Mining Claims. That as to whether since the purchase of said Custer No. 2 and said Silver Hill No. 4 Lode Mining Claims by this defendant as hereinbefore alleged, said complainant, since its incorporation, has been, or prior thereto said Treweek or Burch were, or said complainant now is, ready, able or willing to pay or contribute $\frac{3}{4}$ of the purchase paid by this defendant for said aforesaid mining claims, this defendant has no knowledge or information thereof, and

98 leaves said complainant to make such proof thereof as it may be advised.

This defendant denies that by reason of the purchase by this defendant of said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, said complainant has been, or now is, or either or any of its grantors have been, greatly or wrongfully or at all, prejudiced in any way whatever, as tenants in common of said Conkling Lode Mining Claim, as hereinbefore described, or otherwise, or at all.

Answering paragraph numbered 18 of said amended bill of complaint, this defendant admits that the survey of the Conkling Lode Mining Claim was made in the month of November of the [---] 1889

by Adolph Jessen, now deceased, then Deputy United States Mineral Surveyor, but that as to whether all other persons connected with the making of said survey of said Conkling Lode Mining Claim, are dead, or their whereabouts unknown, this defendant has no knowledge or information thereof, and therefore leaves said complainant to make such proof thereof as it may be advised.

This defendant admits that said Conkling Lode Mining Claim is situated in a rough country, at a high altitude and that the surface is covered partly by large trees and brush and undergrowth, and that the yearly snow-fall in the winter, thereat is great, but this defendant denies that none of the original marks or boundaries of said Conkling Lode Mining Claim, referred to in said patent, is now standing, and denies that the original place where the respective corners were marked, is now a matter of speculation merely; and to the contrary thereof this defendant alleges that some of the original posts and monuments, marking the boundaries of said Conkling Lode Mining Claim, are now standing in place in their original position, and that they are the permanent objects referred to in the field notes of said survey of said Conkling Mining Claim, with the proper marking thereon, now standing in their original position, and that certain bearing-trees, identifying and locating the position of the original monuments of said claim, are now standing, properly marked, and have been ever since the said survey was made, as aforesaid, and that the original position upon the ground of said Conkling Lode Mining Claim can be definitely and accurately determined from the permanent objects, monuments, bearing-trees and other references found in the field notes of the survey of said claim and

99 upon the ground where said premises are located; and this defendant denies that it, or any of its predecessors in interest, by any means whatever, have been secretly, or at all, scheming or designing, by any ways or means whatever, or by any methods whatever, except as hereinbefore in this answer set forth and alleged, to secure to this defendant exclusively or at all, the said 135.5 foot strip of ground hereinbefore mentioned and referred to, and that the only means or method used by this defendant, or any of its predecessors in interest or title, to secure said 135.5 foot strip, was by the purchase by it from said Belmont Mining Company of the said 135.5 foot strip, part and parcel of said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, conveyed to it by said Thomas Kearns, trustee, as aforesaid; and this defendant denies that any part or portion of said 135.5 foot strip belongs to, or is part or parcel of, said Conkling Lode Mining Claim, as described in said patent, or otherwise. And this defendant admits, as it has heretofore admitted, that it purchased the said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, embracing said 135.5 foot strip, without informing said complainant, or any of its predecessors in interest; and this defendant denies, as it has heretofore denied, that either said complainant, or any of its predecessors in interest have been at any time whatever the tenant in common with this defendant, or any of its predecessors in interest, of, in or to any part or portion of said 135.5 foot strip, or any of the ores or minerals, lodes or veins therein contained. And

this defendant denies that by reason of any act or thing done or omitted by this defendant, or any of its predecessors in interest, said complainant, or any of its predecessors in interest, at this late date, or any other date, have been left entirely or at all helpless to meet the contentions now made by said defendant in reference to the boundaries of the said Conkling Lode Mining Claim; and on the contrary this defendant alleges that said complainant and its predecessors in interest have at all times been fully able to ascertain and determine the true and correct boundaries of said Conkling Lode Mining Claim, as the same exists upon the ground and that if said complainant, or any of its predecessors, had gone upon the ground, it or they at any time since the survey of said Conkling Lode Mining Claim, in the year 1889, as aforesaid, could and would have ascertained and determined that the correct location of said Conkling Lode Mining Claim, as the same exists upon the ground, is as said claim is described in this answer and not otherwise. And this defendant denies that it was or is its duty, as tenants in common with

100 said complainant, or its predecessors in interest, or otherwise, to secure the entire area described in the patent for said Conkling Lode Mining Claim, without reference to the field notes and actual facts as they exist upon the ground; and denies that it was or is the duty of said defendant, or any of its predecessors in interest not to acquire, or attempt to acquire, any interest in and to any ground or premises not embraced within the said Conkling Lode Mining Claim, as the same exists upon the ground or not to acquire, or attempt to acquire, any interest in or to any ground which might or could be embraced within the alleged described boundaries of the Conkling Lode Mining Claim, as set forth in the amended complaint herein; and on the contrary this defendant alleges that it was its duty and that of its predecessors in interest to attempt to ascertain and to ascertain the true and actual boundaries of said Conkling Lode Mining Claim, as the same were and are located upon the ground; and alleges in that behalf that it has performed its full duty and has ascertained and determined that the said Conkling Lode Mining Claim, as the same exists upon the ground, is as set forth and described in this answer, and not otherwise. And this defendant admits that neither the Government of the United States, nor any third parties, or any person or party whomsoever, except the complainant and its predecessors in interest, does now dispute or contest or ever has disputed or contested the said Conkling Lode Mining Claim, as patented and as the same is described in this answer. And this defendant alleges that the field notes of the survey of the said Conkling Lode Mining Claim are part and parcel of the patent record thereof, and that the said description contained in the said patent is controlled by the field notes of the survey thereof, and by the monuments, posts, permanent objects and bearing-trees found upon the ground; and this defendant alleges that in case of any conflict between the description of the said Conkling Lode Mining Claim, as contained in the patent thereof, and the description thereof as the same is located upon the ground by permanent monuments, objects and other permanent objects, including bearing-trees and ties to other well known

mining claims, and reference in the field notes to the surveys of other mining claims in the vicinity, that the description contained in the patent must give way to such field notes, ties, permanent objects, monuments and bearing-trees.

Further answering said bill of complaint, this defendant alleges that it is now, and continuously for more than four years and seven months last past has been, the owner of, in the possession of 101 and entitled to the possession of certain lode mining claims, situated in the Uintah Mining District, Summit County, State of Utah, known as and called the "Pinyon and Pinyon Extension" Lode Mining Claim, Lot No. 42, the "Boss" Lode Mining Claim, Lot No. 126, the "Zephyr" Lode Mining Claim, Lot No. 459, the "Brave Columbia" Lode Mining Claim Lot No. 14, the "Constitution" Lode Mining Claim, Lot No. 215, the "Cumberland" Lode Mining Claim, Lot No. 216 and the "Monroe Doctrine" Lode Mining Claim, Lot No. 217.

That the said Pinyon and Pinyon Extension Mining Claim is bounded and described as follows, to-wit:

Beginning at Post No. 1 and running thence on a true course magnetic variation 17 deg. 20 min. East, North 57 deg. 29 min. West 200 feet to Post No. 2; thence South 32 deg. 23 min. West 2809.4 feet to Post No. 3; thence South 54 deg. 00 min. East 194.1 feet to Post No. 4; thence N. 32 deg. 30 min. East 2821.1 feet to Post No. 1, the place of beginning. From Post No. 1 United States Mineral Monument No. 4 bears South 43 deg. 04 Min. West 1393.1 feet distant.

That the said Boss Lode Mining Claim is bounded and described as follows:

Beginning at Post No. 1, and running thence on a true course, magnetic variation, 17 deg. 20 min. East, South 13 deg. 45 min. East 207.6 feet to Post No. 2, thence South 61 deg. 24 min. West 1481.1 feet to Post No. 3; thence North 13 deg. 50 min. West 196.7 feet to Post No. 4; thence North 60 deg. 0 min. East 1491.2 feet to Post No. 1, the place of beginning. From Post No. 1, U. S. Mineral Monument No. 4 bears North 59 deg. 18 min. West 404.9 feet distant.

That the said Zephyr Lode Mining Claim is bounded and described as follows:

Beginning at Post No. 1, and running thence on a true course, magnetic variation, 17 deg. 20 min. East, North 67 deg. 41 min. East 567.8 feet to Post No. 2, thence South 48 deg. 23 min. East 79.6 feet to Post No. 3; thence South 60 deg. 34 min. West 543.4 feet to Post No. 4; thence North 46 deg. 01 min. West 92.8 feet to Post No. 2, the place of beginning. From Post No. 1, U. S. Mineral Monument No. 4 bears North 49 deg. 05 Min. East 1272.1 feet distant.

That the said Brave Columbia Lode Mining Claim is bounded and described as follows:

102 Beginning at Post No. 1, and running thence on a true course, magnetic variation, 17 deg. 20 min. East, South 43 deg. 04 Min. West 206.9 feet to Post No. 2; thence South 45 deg. 53 min. East 1428.2 feet to Post No. 3; thence North 45 deg. 07 min. East 200 feet to Post No. 4; thence North 45 deg. 32 min. West 1437.1 feet to Post No. 1, the place of beginning. From Post No. 1 U. S. Mineral Monument No. 4 bears North 89 deg. 52 min. East 1810.1 feet distant.

That the said Constitution Lode Mining Claim is bounded and described as follows:

Beginning at Post No. 1, and running thence on a true course, magnetic variation, 17 deg. 20 min. East, South 42 deg. 55 min. West 200.7 feet to Post No. 2; thence South 46 deg. 13 min.; East 1420.6 feet to Post No. 3; thence North 44 deg. 38 min. East 201.2 feet to Post No. 4; thence North 46 deg. 15 min. West 1426.6 feet to Post No. 1, the place of beginning. From Post No. 1 U. S. Mineral Monument No. 4 bears North 87 deg. 05 min. East 2014.8 feet distant.

That the said Cumberland Lode Mining Claim is bounded and described as follows:

Beginning at Post No. 1, and running thence on a true course, magnetic variation, 17 deg. 20 min. East, South 45 deg. 07 min. West 200 feet to Post No. 2; thence South 46 deg. 09 min. East 1424.3 feet to Post No. 3; thence North 45 deg. 33 min. East 199.6 feet to Post No. 4; thence North 46 deg. 8 min. West 1425.8 feet to Post No. 1, the place of beginning. From Post No. 1, U. S. Mineral Monument No. 4 bears North 85 deg. 16 min. East 2216.6 feet distant.

That the said Monroe Doctrine Lode Mining Claim is bounded and described as follows:

Beginning at Post No. 1, and running thence on a true course, magnetic variation, 17 deg. 20 min. East, South 45 deg. 25 min. West 198.5 feet to Post No. 2; thence South 46 deg. 02 min. East 1419.9 feet to Post No. 3; thence North 45 deg. 48 min. East 199.9 feet to Post No. 3; thence North 45 deg. 48 min. East 199.9 feet to Post No. 4; thence North 46 deg. 05 min. West 1421.3 feet to Post No. 1, the place of beginning. From Post No. 1 U. S. Mineral Monument No. 4 bears North 83 deg. 35 min. East 2417.4 feet distant.

That each of said mining claims was long since patented to the predecessors in interest of this defendant by the Government
 103 of the United States; that the patent for the said Pinyon and Pinyon Extension Mining Claim bears date October 18, 1873; that the patent for the said Boss Mining Claim bears date October 27, 1881; that the patents for the said Brave Columbia, said Constitution, said Cumberland and said Monroe Doctrine Mining Claims

each bears date March 31st, 1883, and that the patent for the said Zephyr Mining Claim bears date June 1st, 1898.

That the said Pinyon and Pinyon Extension Mining Claim crosses the said Boss Mining Claim, and the area in conflict between the two was conveyed by said patent to the said Pinyon and Pinyon Extension Mining Claim.

That in said mining claims, so owned by this defendant, as aforesaid, there is a vein or lode of rock in place, bearing gold, silver, lead and other valuable metals, which on its course and at its apex, crosses the easterly end line of the said Boss Mining Claim, and thence on its course or strike and at its apex, traverses said claim in a westerly direction for a distance of about 484 feet, where, at its apex and on its course or strike, it crosses the southerly side line of the said Pinyon and Pinyon Extension Mining Claim, and thence on its course or strike and at its apex, traverses the said Pinyon and Pinyon Extension Mining Claim in a westerly direction for a distance of about 334 feet, where, at its apex and on its course, it crosses the opposite or northerly side line of the said Pinyon and Pinyon Extension Mining Claim, at which point, at its apex and on its course or strike, it re-enters the said Boss Mining Claim, and thence, at its apex and on its course or strike, it crosses the northerly side line of the said Boss Mining Claim, to-wit, at a point about 125 feet easterly of the northwesterly corner of the said Boss Mining Claim, at which point, at its apex and on its course or strike, it crosses the southerly side line of the said Zephyr Mining Claim, and thence, at its apex and on its course or strike, it traverses in a westerly direction the said Zephyr Mining Claim for a distance of about 57 feet, where it crosses the westerly end line of the said Zephyr Mining Claim, at which point, at its apex and on its course or strike, it crosses the located easterly side line of the said Brave Columbia Mining Claim, and thence on its course westerly and at its apex, passes to and across the westerly located side line of the said Brave Columbia, and thence on its course or strike and at its apex traverses the said Constitution Mining Claim, crossing both of the located side lines thereof, and thence on its course or strike and at its apex, traverses the

104 said Cumberland Mining Claim, crossing both the located side lines thereof and thence on its course or strike and at its apex, traverses the said Cumberland Mining Claim, crossing both of the located side lines thereof, and thence on its course and strike and at its apex, it traverses the said Monroe Doctrine Mining Claim, crossing both of the located side lines thereof.

That the location of the said Pinyon and Pinyon Extension Mining Claim, and upon which said patent for said claim was issued, as aforesaid, was made or laid upon a vein which crossed the located side lines thereof, as was also the said Brave Columbia, the said Constitution, the said Cumberland and the said Monroe Doctrine Mining Claims.

That said vein dips in a southerly direction, and in its course downward so far departs from a perpendicular that it passes beyond the legal side lines extended downward vertically of each of said mining claims, so owned by this defendant, as aforesaid, and thence con-

tinuing on its dip or course downward, passes into, beneath and beyond the exterior boundaries, extended downward vertically, of the said Conkling Mining Claim, not only as the same is hereinbefore in this answer described, but also as the same is described in said complainant's bill of complaint herein.

That this defendant is the owner, in the possession and entitled to the possession, and it and its predecessors in interest, for more than seven years last past, have been the owners, in the possession and entitled to the possession, throughout its entire depth, of all that portion of said vein between the following planes; first, one drawn through the easterly end line of the said Boss Mining Claim, extended indefinitely in its own direction, and another parallel thereto, drawn through the point where said vein, at its apex and on its course, crosses the northerly side line of said Boss Mining Claim, as aforesaid; and, second, between planes, one drawn through the located westerly side line of the said Monroe Doctrine Mining Claim, extended indefinitely in its own direction, and another parallel thereto, drawn through the point where said vein, at its apex and on its course crosses, as aforesaid, the southerly side line of the said Zephyr Mining Claim.

That all of the ores at any time mined or removed by this defendant, or any of its predecessors in interest, from beneath the surface of the said Conkling Mining Claim, lay in and belonged to, and were a part of, the said vein or lode so having its top or apex in the said mining claims of this defendant, as aforesaid, and between
105 planes, one drawn through the easterly end line of the said Boss Mining Claim, and extended as aforesaid, and another through the westerly located side line of the said Monroe Doctrine Mining Claim, extended as aforesaid.

Wherefore, this defendant having fully answered, confessed, traversed and avoided or denied, all the matters in the said amended bill of complaint, material to be answered, according to its best knowledge and belief, humbly prays this Honorable Court to enter its decree that this defendant, be hence dismissed with its reasonable costs and charges in this behalf most wrongfully sustained, and for such other and further relief in the premises as to this Honorable Court may seem meet and in accordance with equity.

A. C. ELLIS,
A. C. ELLIS, JR.,
RUSSELL G. SCHULDER,
Solicitors for Defendant.

SILVER KING COALITION MINES
CO.,

By F. J. WESTCOTT,
Sec'y.

W. H. DICKSON,
Of Counsel.

[SEAL.]

STATE OF UTAH,
County of Salt Lake, ss:

Frank J. Westcott being first duly sworn, upon his oath, deposes and says that he is an officer of the defendant corporation above named, to wit: the secretary thereof; that he has read the above and foregoing amended answer and knows the contents thereof and that the same is true of his own knowledge except as to matters therein stated upon information and belief and as to such matters he believes it to be true.

FRANK J. WESTCOTT.

Subscribed and sworn to before me this 14th day of December, 1911.

[SEAL.]

ALLIE LEVRY,
Notary Public.

My commission expires May 27, 1913.

Copy of the above and foregoing amended answer received and due service admitted this 14 day of December, 1911.

WILLIAM H. KING,
Solicitors for Complainant.

Filed Dec. 16, 1911.

JERROLD R. LETCHER,
Clerk.

106

(Recital of Proceedings.)

Pursuant to stipulation this cause came on for trial upon all the issues in said cause, except the accounting prayed for, on Monday, January 22, 1912, before Honorable John A. Marshall, counsel for respective parties being present. * * *

Evidence being taken and the cause having been argued and submitted to the Court, it was taken under advisement, and thereafter, and on the 5th day of August, 1912, this Court entered its decree in favor of the defendant, adjudging that it was the owner of the 135.5 foot strip, and that the west end line of the Conkling claim was the line claimed by the defendant; that the defendant also was the owner of the ore bodies in dispute, by virtue of the ownership of the apex of the vein in which said ore bodies were found; and the plaintiff's Bill of Complaint was therefore dismissed.

Thereafter the plaintiff prosecuted an appeal to the Honorable Circuit Court of Appeals for this District, and on February 12, 1916, an opinion was rendered by said Court reversing the judgment of this Court, and declaring that the plaintiff was the owner of the 135.5 foot strip—that it was part of the Conkling lode mining claim, and that the defendant did not have a right to the ore in controversy by virtue of the ownership of the apex of the vein in which said ore was found; and the cause was remanded to this Court

for further proceedings consistent with the views expressed in said opinion.

(Defendant's Motion to Reopen Case for the Introduction of Further Testimony.)

Comes now the Silver King Coalition Mines Company defendant in the above-entitled action, and moves this Honorable Court to reopen the trial of said cause and to permit said defendant to introduce further evidence in support of its asserted right to follow the Crescent fissure vein mentioned in the testimony heretofore taken in said cause, in its downward *court* extralaterally beyond the southerly located end line of the Brave Columbia mining claim, the Constitution Mining claim, the Cumberland mining claim, and the Monroe Doctrine mining claim, mentioned in the testimony heretofore taken in said cause, between planes, one drawn vertically downward through the westerly located side line of the said Monroe Doctrine and extended southerly indefinitely in its own direction, and the other drawn vertically downward through the easterly located side line of the said Brave Columbia mining claim and extended southerly indefinitely in its own direction.

107 Said motion is made and based upon the record in said cause, the testimony heretofore taken therein, and the affidavits of James Hume, Thomas Kearns, and R. H. Browne, presented herewith.

DICKSON, ELLIS, ELLIS & SCHULDER,
THOS. MARIGNEAUX,

Solicitors for Said Defendant.

Endorsed: Filed in the District Court on Dec. 16, 1916.

(Notice of Motion to Reopen Case.)

To Messrs. E. B. Critchlow and William D. McHugh.

GENTLEMEN:

You will please take notice that on Saturday, the 16th day of December, 1916, at 10 o'clock A. M., or as soon thereafter as counsel can be heard, the defendant above-named, Silver King Coalition Mines Company, will move the said court, pursuant to the permission or leave so to do granted by said court on the 27th day of November, 1916, to re-open the trial of said cause and to permit said defendant to introduce further evidence in support of its asserted right to follow the Crescent fissure vein, so designated in the testimony heretofore taken in said cause, in its downward course, extralaterally between planes, one drawn vertically downward through the westerly located side line of the Monroe Doctrine claim and extended southerly indefinitely in its own direction, and the other drawn vertically downward through the easterly located side line of the Brave Columbia mining claim and extended southerly indefinitely in its own direction.

Said motion will be made and based upon the record in said cause, the testimony heretofore taken therein, and the affidavits of James Hume, Thomas Kearns and R. H. Browne, a copy of each of which is annexed hereto.

DICKSON, ELLIS, ELLIS & SCHULDER,
THOS. MARIONEUX,

Solicitors for Defendant.

Dated, December 15, 1916.

108 Received copy of the above notice this 15th day of December, 1916.

E. B. CRITCHLOW,
W. D. McHUGH,

Attorneys for Plaintiff.

Endorsed: Filed in the District Court on Dec. 16, 1916.

(Affidavit of James Hume in Support of Defendant's Motion to Reopen the Case.)

STATE OF UTAH,

County of Salt Lake, ss:

James Hume, being first duly sworn, deposes and says:

For more than thirty-seven years last past my business has been that of a miner, and during all of that period I have been almost continuously employed in the business of mining and have carried on mining operations in the States of Nevada, Colorado, Arizona, Montana, and in the Province of British Columbia, Dominion of Canada.

For a period of more than two years, commencing in 1901, I was employed as superintendent of the Jessie Mining Company, situated at Butte, Montana.

Thereafter, and commencing in 1903, I was employed for more than a year as the superintendent of the Speculator Mine, situated in Butte, Montana.

Commencing in 1904, I was thereafter, for a period of more than three years, employed as the superintendent of the Eva May mine, in Jefferson County, Montana.

Thereafter, and for a period of more than two years, I was employed as superintendent of the Copper Canyon Mine in said Province of British Columbia.

Thereafter, I was for more than three years employed as superintendent of the Austin-Manhattan Mining Company, in Lander County, Nevada.

That I am now, and continuously since the 4th day of December, 1912, have been, superintendent of the Silver King Coalition Mines Company, defendant in the above-entitled action.

I am familiar with the surface of the Monroe Doctrine Cumberland, Constitution and Brave Columbia mining claims, mentioned and described in the Answer in the above-entitled action. I am also familiar with the surface and underground

workings of the properties contiguous to said claims. I am familiar with the places in the said Monroe Doctrine, Cumberland, Constitution and Brave Columbia claims designated in the patent of said claims, respectively, as the discovery point of said claims, respectively. That the depth of the wash or debris at the discovery point so designated, of the said Monroe Doctrine, the said Cumberland, the said Constitution, and the said Brave Columbia, is not less than fifteen feet. I am familiar with the discovery pit or shaft referred to in the testimony heretofore taken in this cause as the discovery pit or shaft of each of said claims, namely: Monroe Doctrine, Cumberland, Constitution and Brave Columbia; that neither of said discovery pits or shafts, so-called, reached bed rock.

Commencing the latter part of October, 1916, the following work has been prosecuted in the said Monroe Doctrine claim under my direction, namely: 55 feet in an easterly direction from said designated discovery point of said claim, and 46 feet in a westerly direction therefrom; that all of said work is driven on or immediately below the top of bed rock and passes vertically beneath said discovery pit or shaft of said claim.

That during the period last aforesaid the following work has been prosecuted under my direction in the said Cumberland claim, namely: a distance of 44 feet in a westerly direction from the said designated discovery point, and a distance of 45 feet in an easterly direction therefrom; that all of said work is driven on or immediately below the top of bed rock and passes vertically beneath the said discovery pit or shaft of said claim.

That during the same period there has been driven under my direction the following work in said Constitution claim, namely: 52 feet in a westerly direction from said designated discovery point, and 41 feet in an easterly direction therefrom; that all of said work is driven on or immediately below the top of bed rock and passes vertically beneath the said designated discovery pit or shaft of said claim.

That during said period there has also been driven under my direction the following work in said Brave Columbia claim, namely: 77 feet in a westerly direction from said designated discovery point and 38 feet in an easterly direction therefrom; that all of said work is driven on or immediately below the top of bed rock and
110 passes vertically beneath the said discovery pit or shaft of said claim.

That nowhere in the said work so done under my direction on the said Monroe Doctrine, the said Cumberland, the said Constitution and the said Brave Columbia claims, is there disclosed any fissure, vein or lode, containing any gold, silver or other valuable metal or mineral, or any fissure, vein or lode whatever, running or coursing in a northerly and southerly direction, or any fissure, vein or lode disclosed, coursing in any direction whatsoever or at all. That the said work so done under my direction in each of said claims has been prosecuted with diligence since the same was commenced in the latter part of October of the present year and is now being prosecuted diligently, and by the continued diligent prosecution thereof, said

work can be completed to and across both of the located side lines of said Monroe Doctrine, to and across both the located side lines of the said Cumberland, to and across both of the located side lines of said Constitution, and to an across both of the located side lines of said Brave Columbia, by about the middle of January, 1917, and from my familiarity with the premises and the territory adjacent thereto, I am firmly of the opinion and believe that the continuation of said work to and across the located side lines of each of said claims will fail to disclose any fissure, vein or lode carrying or containing any gold, silver or other valuable metal or mineral, or any fissure, vein or lode whatever, running or coursing in any direction. The said Monroe Doctrine, Cumberland, Constitution and Brave Columbia claim are correctly platted upon the map, Exhibit "A," attached hereto and made a part hereof, and the said work so done under my direction on each of said claims as aforesaid is also correctly designated upon said map or plat.

JAMES HUMES.

Subscribed and sworn to before me this 14th day of December, 1916.

J. F. FITZPATRICK,

[SEAL.]

Notary Public, Salt Lake County,
State of Utah.

My commission expires Dec. 9, 1918.

United States District Court.

Endorsed: Filed in the District Court on Dec. 16, 1916.

111 (*Affidavit of Thomas Kearns in Support of Defendant's Motion to Reopen Case.*)

STATE OF UTAH,
County of Salt Lake:

Thomas Kearns, being first duly sworn, deposes and says:

I am the vice-president and general manager of the Silver King Coalition Mines Company, defendant in the above-entitled action, and have been such vice-president and general manager ever since the organization of said company, to-wit: in the month of May, 1907;

On or about the 15th day of October, 1916, I, as such general manager of said defendant company, instructed James Hume, the then and now superintendent of said defendant company, to commence forthwith and prosecute with all reasonable diligence drifts or tunnels on or immediately below the top of bed rock easterly and westerly from the point designated as the discovery in the patent to the Brave Columbia mining claim, and from the point designated as the discovery in the patent to the Cumberland Mining Claim, and from the point designated as the discovery in the patent to the Constitution mining claim, and from the point designated as the dis-

covery in the Monroe Doctrine mining claim, until such drifts or tunnels should be driven to and across the located side lines of each of said claims, and as such general manager, it is my intention to, and I will, cause said drifts or tunnels to be continued from their present faces with all possible diligence until they are driven to and across the located side lines of each of said claims. All said work was commenced and is being prosecuted for the purpose of showing that there is not any fissure, vein or lode in either the said Brave Columbia, Cumberland, Constitution or Monroe Doctrine mining claim, running or coursing in a northerly and southerly direction. I am familiar with each of said claims and with all work heretofore done beneath the surface of each of them, and am also familiar with the territory, both easterly and westerly, and contiguous to, or in proximity to said claims, and from my familiarity with said claims and all workings therein, it is my unqualified belief that said tunnels and drifts driven at or immediately below the top of bed rock to and across both of the located side lines of each of said claims from said designated discovery point of each, will fail to disclose any fissure, vein or lode containing or carrying any gold, silver or other valuable metal or mineral, or any fissure, vein or lode whatever, running or coursing in any direction whatever.

THOMAS KEARNS.

Subscribed and sworn to before me this 15th day of December, 1916.

J. F. FITZPATRICK,

[SEAL.]

Notary Public, Salt Lake County,
State of Utah.

My commission expires Dec. 9, 1918.

United States District Court.

Endorsed: Filed in the District Court on Dec. 16, 1916.

(*Affidavit of R. H. Browne in Support of Defendant's Motion to Reopen Case.*)

STATE OF UTAH,

County of Salt Lake, ss:

R. H. Browne, being first duly sworn, deposes and says:

I am and for more than forty-five years last past have been a civil and mining engineer. During the year 1887 I was employed by the Apex Mining Company, a corporation, and one of the predecessors in interest of the defendant, Silver King Coalition Mines Company, in and to the Brave Columbia, Constitution, Cumberland and Monroe Doctrine mining claims, mentioned and described in the amended answer in the above-entitled action, to make surveys of the underground workings of the said Apex Mining Company. That prior to January 7, 1887, the said Apex Mining Company had developed and was working upon and extracting ore from the Crescent fissure vein, so designated in the testimony heretofore taken

in this cause, extralaterally, that is to say; beyond the southerly end line of the said Brave Columbia, Constitution, Cumberland and Moroe Doctrine mining claims, between planes, one drawn vertically downward through the westerly located side line of the said Monroe Doctrine and extending indefinitely in its own direction southerly and the other drawn vertically downward through the easterly located side line of the said Brave Columbia, extended southerly in definitely in its own direction. That the Conkling mining claim, mentioned in the above-entitled action, was not located until the 8th day of June, 1888.

R. H. BROWNE.

113 Subscribed and sworn to before me this 15th day of December, 1916.

[SEAL.]

J. F. FITZPATRICK,
Notary Public, Salt Lake County,
State of Utah.

My commission expires Dec. 9, 1918.

Endorsed: Filed in the District Court on Dec. 16, 1916.

Thereafter said motion came on for hearing and was granted by the Court; but upon re-argument and further consideration, the Court denied the said motion, to which the defendant duly excepted.

(*Interlocutory Decree of the District Court, January 20, 1917.*)

CONKLING MINING COMPANY, a Corporation, Plaintiff,

vs.

SILVER KING COALITION MINES COMPANY, a Corporation, Defendant.

This cause came on to be further heard at this term. The mandate herein of the United States Circuit Court of Appeals for the Eighth Circuit was presented and filed, and after argument of counsel it was ordered, adjudged and decreed as follows:

That the plaintiff do have and recover from the defendant the sum of \$— taxed costs upon the appeal of the United States Circuit Court of Appeals, and that execution issue therefor.

It is further adjudged and decreed that the plaintiff on and after September, 1908, was the owner of an undivided three-fourths interest in the Conkling and Arthur Lode Mining claims described in the bill of complaint, herein.

It is further adjudged and decreed that the said Conkling lode mining claim is situated in Uintah Mining District County of Summit, State of Utah, and comprises all the tract embraced within the boundary lines described as follows:

Beginning at corner No. 1, a pine post four inches square marked U. S. 689 P. I.

Thence first course north twenty-one degrees and nine minutes west three hundred feet to discovery point six hundred feet to corner

No. 2, a pine post four inches square marked U. S. 689 P. 2, 114 being also corner No. 4, of Lot No. 191, the Lincoln Lode Claim, and corner No. 2 of Lot No. 580, the Pirate King lode claim, from which U. S. mineral monument No. 4 bears north thirty-two degrees and fifty-two minutes west nine hundred and thirty-nine and three-tenths feet distant and a pine tree four inches in diameter marked U. S. 689 P. 2 B. T. bears north thirteen degrees west twenty-eight feet distant.

Thence second course, south sixty degrees and forty-five minutes west one thousand five hundred feet to corner No. 3.

Thence third course south twenty-one degrees and nine minutes east six hundred feet to Corner No. 4.

Thence fourth course north sixty degrees and forty-five minutes east one thousand five hundred feet to corner No. 1, the place of beginning; said Lot No. 689 extending one thousand five hundred feet in length along said Conkling vein or lode and containing twenty acres and forty-five hundredths of an acre of land more or less, the said tract being 600 feet in width and 1,500 feet in length.

It is further adjudged and decreed that the defendant herein is without right to three-fourths of the ore which is, and three-fourths of the ore which was beneath the surface of the said Conkling lode mining claim.

It is further adjudged and decreed that since September 1908 the said defendant and the said complainant have been tenants in common in the land and premises consisting of the said Conkling lode mining claim and the said Arthur lode mining claim.

It is further adjudged and decreed that defendant has taken ore from within the boundaries of the said Conkling lode mining claim, and is therefore under obligation to account to the said plaintiff for and on account of the ores and mineral bearing rock mined and extracted from the said premises by the defendant.

It is therefore Ordered, Adjudged and Decreed that the defendant do render its full and true account of all the ores, mineral and mineral bearing rock by it taken from said premises or any part thereof; that the account be brought in by defendant and filed herein as nearly as may be in accordance with the 63rd Equity Rule within 115 twenty days from this date, and that thereafter the further hearing and the taking of proofs be proceeded with in accordance with such further orders as may be made in the premises.

All other matters proper to a final decree in this cause are reserved until the consideration of the testimony to be taken.

TILLMAN D. JOHNSON,
Judge.

Dated Jan'y 20, 1917.

Endorsed: Filed in the District Court on January 20, 1917.

Thereupon the defendant filed an account, pursuant to the mandate of said interlocutory decree, and the same was in words and figures, as follows:

(Defendant's Statement of Account as to Ore Mined from Conkling Mining Claim, etc.)

The defendant above-named makes and files the following statement of account, showing the tonnage and value per ton of all shipping ore mined by it from the Conkling Mining claim mentioned in the complaint (according to the description of said claim contained in the patent thereto); also the cost to defendant per ton for mining, milling, tramming and sampling the crude or shipping ore; also the tonnage and value per ton of all milling ore mined by defendant from said Conkling mining claim, and the cost to it per ton for mining, milling, sampling and tramming the said milling ore; also moneys expended by defendant and its predecessor in interest the Kearns-Keith Mining Company (named in plaintiff's bill of complaint), in exploratory and development work in search of ore in the Conkling and Arthur mining claims (mentioned in said complaint) and which resulted in the discovery of all ores heretofore mined by said defendant from said common property:

Development Work Done by Silver King Co. in Conkling and Arthur Claims.

Year.

1902. Cleaned out and in places retimbered Crescent Drift a distance of 2,079.5 ft. easterly from a point which is 65 ft. easterly from the west end line of the Arthur claim, at a cost per foot of \$3.00.....	\$6,238.50	
Drifting, all in Arthur claim, 90 ft. @ \$12 per ft.....	1,080.00	
	<hr/>	\$7,318.50
Int. on \$7,318.50 @ 8% from Jan. 1, 1903, to May 1, 1907.....		\$2,537.08

1903.

1903. Drifting, 154 ft. within Arthur claim, @ \$15.38 per ft.....	2,368.52	
Drifting 1,071 ft. within Conkling claim, @ \$15.38 per ft.....	16,471.98	
	<hr/>	\$18,840.50
Int. on \$18,840.50 @ 8% from Jan. 1, 1904, to May 1, 1907..		5,024.12

1904. Drifting, all within Conkling claim, 903 ft.:		
60 ft. @ \$54.073 per ft.....	\$3,244.38	
468 ft. @ \$26.186 " ".....	12,255.05	
375 ft. @ \$15.38 " ".....	5,767.50	
	<hr/>	\$21,266.93

Int. on \$21,266.93 @ 8% from Jan. 1, 1905, to May 1, 1907..		3,969.82
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1905. Drifting, all within Conkling claim, 380 ft.:		
250 ft. @ \$26.186 per ft.....	\$6,546.50	
130 ft. @ \$12.00 " ".....	1,560.00	
	<hr/>	
	\$8,106.50	
Int. on \$8,106.50 @ 8% from Jan. 1, 1906, to May 1, 1907..		864.68
1906. Drifting, all within Conkling claim, 326 ft.		
@ \$12 per ft.....	\$3,912.00	
	<hr/>	
Int. on \$3,912.00 @ 8% from Jan. 1, 1907, to May 1, 1907..		104.32
1907. Drifting, all within Conkling claim, 140 ft.		
@ \$12 per foot completed before June 1,		
1907	\$1,680.00	
	<hr/>	
	\$61,124.43	\$12,500.02
	<hr/>	
Total expenditure and Interest to May 1, 1907.....		\$73,624.45
Less Interest included paid from ore proceeds as below..		12,500.02
		<hr/>
		\$61,124.43

No ore was mined and removed from the Conkling ground prior to May 1, 1907. Between that date and June 30, 1910, the Silver King Coalition Mines Co. mined not to exceed the tonnage stated below from the said Conkling ground, and the gross value per ton, less freight and treatment charges, did not exceed \$32.25 for First class or Shipping ore and \$11.70 per ton for Milling Ore.

The ore mined from the Conkling Ground from May 1, 1907, to December 31, 1907, and the value thereof at the above rates, was as follows:

Carried Forward.....	\$61,124.43
Brought Forward.....	\$61,124.43

117

1,629.5 Tons Shipping Ore, 3,379 Tons Milling Ore—	
Value	\$92,085.70

The expense chargeable to ore mined in the Conkling Ground in 1907 was as follows:

Mining 5,018.5 Tons @ \$6.00 per ton....	\$30,111.00
Milling 3,379.0 " @ \$1.82 " "	6,149.78
Sampling & Trammig 1,613 T. Shipping	
Ore @ 62.9¢.....	1,014.58
Sampling and Trammig 921.7 T. Con-	
centrates @ 62.9¢.....	587.74

Development Expenditure within Conkling Claim:

91 ft. at \$15.38 per ft.—Drifting.....	1,399.58
73 ft. at \$12.00 per ft.— “	876.00
43½ ft. at \$10.00 per ft.— “	435.00
59 ft. at \$25.00 per ft.—Drifting 3 comp. raise	1,475.00
15 ft. at \$10.00 per ft.—Drifting 1 comp. raise	150.00
	<hr/> 42,208.68

Net Proceeds.....	49,877.02	
Less Interest to May 1, 1907, applied against proceeds	12,500.02	
	<hr/>	37,377.00
Balance due defendant Company at December 31, 1907.....		<hr/> 23,747.43

The Ore mined from the Conkling ground during the year 1908, and the value thereof at the afore-stated rates, was as follows:

1,249.5 Tons Shipping Ore, 2,498 Tons Milling Ore— Value	\$69,523.00
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The expense chargeable to ore mined in the Conkling ground, in 1908, was as follows:

Mining 3,747.5 tons @ \$6.00 per ton.....	\$22,485.00
Milling 2,498 “ @ \$1.82 “ “	4,546.36
Sampling & Trammig 1,197.5 T. Ship- ping Ore @ 62.9¢.....	753.22
Sampling & Trammig 684.3 T. Concen- trates @ 62.9¢.....	430.42

Development expenditure within Conkling Ground:

Drifting 14 ft. @ \$26.186 per ft.....	366.60
“ 96 “ @ \$15.36 “ “	1,476.48
“ 120 “ @ \$12.00 “ “	1,440.00
Switch and Powder magazine equal to 61 ft. @ \$10.....	610.00
Raise—2 Compartment—15 ft. @ \$18. per ft.....	270.00
	<hr/> 32,378.00
	<hr/> 37,145.00

Less Interest from Jan. 1, 1908, to Dec. 31, 1908, on balance of \$23,747.43 at 8%.....	1,899.79	
	<hr/>	35,245.21
Balance in favor of Conkling claim at Dec. 31, 1908, (less Interest on account of Improvements as hereinafter shown)		<hr/> \$11,501.78

118 (Error of \$4.00 at this point not corrected.)

The ore mined from the Conklings ground during the year 1909, and the value thereof at the aforesaid rates, was as follows:

763 tons Shipping Ore, 8,011 tons Milling Ore—Value \$118,335.45

The expense chargeable to ore mined in the Conklings ground in 1909 was as follows:

Mining 8,774 tons @ \$5.07 per ton.....	44,484.18
Milling 8,011 " @ \$1.24 " "	9,933.64
Sampling & Trimming 763 T. Shipping Ore @ 62.9¢.....	479.92
Sampling & Trimming 2,280 T. Concentrates @ 62.9¢.....	1,438.71

Development expenditure within Conklings ground:

Drifting 90 ft. @ \$10.00 per ft.....	900.00
	<u>57,236.45</u>

Net proceeds ore.....	61,009.00
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Add 1 year's interest at 8% on \$11,501.78, balance in favor of Conklings Claim at Jan. 1, 1909.....	920.14
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Balance in favor of Conklings Claim at Dec. 31, 1909, (less Interest on account of improvements as hereinafter shown).....	73,520.92
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(Page 3 continued:)

The ore mined from the Conklings ground for 6 months to June 30, 1910, and the value thereof at the aforesaid rates, was as follows:

156 tons shipping ore, 1,638 tons Milling ore—Value. 24,195.60

The expense chargeable to ore mined in the Conklings ground from Jan. 1, 1910, to June 30, 1910, was as follows:

Carried Forward.....	\$24,195.60	\$73,520.92
Brought Forward.....	\$24,195.60	\$73,520.92
Mining 1,794 tons @ \$5.30 per ton.....	\$9,508.20	
Milling 1,638 " @ \$1.22 " "	1,998.36	
Sampling & Trimming 156 T. Shipping Ore @ 62.9¢.....	98.12	
Sampling & Trimming 408 T. Concentrates @ 62.9¢.....	295.00	
	<u>11,800.08</u>	
Net Proceeds Ore.....	12,295.02	

Add 6 months' Interest at 8% on \$72,000.78 (balance at Dec. 31, 1900, less \$920.14 Int. included therein)	\$2,904.03	
		15,199.95
		<hr/>
		\$88,720.87

From said sum of \$88,720.87, the defendant claims that there is to be deducted a sum of \$16,370.79, on account of interest ratably chargeable to the Conkling Claim on moneys invested by defendant in its mine and mill buildings, machinery, 119 tools, tramways, etc. (all of which were used, and necessarily used, in the mining, extraction, treatment, and marketing of ores taken by the defendant from the Conkling claim), as shown by Schedule 1, hereto annexed, leaving a balance of \$72,350.08.

In the foregoing computations the ratio of concentration adopted is that of $3\frac{1}{2}$ tons of crude milling ore into 1 ton of concentrates.

No work was undertaken in the Conkling ground during the period from June 30, 1910, to Apr. 1, 1913, and no ore was extracted or sold therefrom.

The balance in favor of the Conkling claim at June 30, 1910, was (as heretofore shown).....	\$72,350.08
Interest at 8% per annum from July 1, 1910, to December 31, 1912, on \$72,350.08.....	14,470.00
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Balance in favor of Conkling Claim at Apr. 1, 1913, (Principal \$72,350.08, Int. \$14,470.00).....	\$86,820.08
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The ore mined from the Conkling ground from Apr. 1, 1913, to to Dec. 31, 1913, did not exceed the following, and the value thereof did not exceed \$32.25 per ton of Shipping Ore and \$4.81 per ton of Milling Ore, which values are hereby placed on same:

72.75 tons shipping ore, 204 T. Milling Ore—Value..	\$3,759.43
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The expense chargeable to ore mined on the Conkling ground Apr. 1, 1913, to Dec. 31, 1913, is as follows:

Mining 356.75 tons @ \$4.50 per ton.....	\$1,605.37
Milling 204 " @ 1.20 " ".....	352.80
Sampling & Trammings 72.75 T. Shipping Ore @ 62.9¢.....	45.76
Sampling & Trammings 62 T. Concentrates @ 62.9¢.....	38.92

Development expenditure within Conkling ground:

102 ft. of drifting @ \$12. per ft....	1,944.00	
		3,986.85
Excess cost of Ore.....		227.42
Add interest at 8% from Jan. 1, 1913, to Dec. 31, 1913, on \$72,350.08, balance (exclusive of interest) in favor of Conkling claim at Dec. 31, 1912.....		5,788.00
Net additional credit.....		5,560.58
Balance in favor of Conkling Claim at Dec. 31, 1913, (Principal \$72,122.06, Int. \$20,258.00).....		92,380.06

The ore mined from the Conkling ground for the Calendar year 1914 did not exceed the following weights, and the value thereof did not exceed \$32.25 per ton of shipping ore and \$4.50 per ton of Milling Ore, which values are hereby placed on same:

127 Tons shipping Ore 1,143 Tons Milling Ore, Value	9,342.12	
120 The expense chargeable to ore mined in the Conkling ground during the calendar year 1914 is as follows:		
Carry forward.....	\$9,342.12	\$92,380.06
Brought Forward.....	\$9,342.12	\$92,380.06
Mining 1,270 tons @ \$4.50 per ton.....	\$5,715.00	
Milling 1,143 " @ \$1.20 " ".....	1,371.00	
Sampling & Trimming 127 T. Shipping Ore @ 62.9¢.....	79.88	
Sampling & Trimming 240.6 T. Concentrates @ 62.0¢.....	151.33	

Development expenditure within Conkling ground:

Drifting 334 ft. @ \$12. per ft.....	4,008.00	
Drifting 102 ft. @ \$15. per ft.....	1,530.00	
Raise equal to 15 ft. 3 comp. @ \$25. per ft.	375.00	
Station at top of raise from 600 level equal to 58 ft. of drifting at \$10. per ft.	580.00	
		13,810.81
Excess cost of ore.....		\$4,468.00
Int. @ 8% for calendar year 1914 on \$72,122.06 (Bal. at Jan. 1, 1914, exclusive of Interest).....		5,709.81
		1,301.12
Balance in favor of Conkling claim at Dec. 31, 1914, (Principal \$67,053.97, Interest \$26,027.81).....		\$93,681.78

The Ore mined from the Conkling ground for the calendar year 1915 did not exceed the following weights and the value thereof did not exceed \$32.25 per ton of Shipping Ore and \$5.33 per ton of Milling Ore, which values are hereby placed on same:

98.4 tons shipping ore, 2,804 tons Milling Ore—Value 18,318.72

The expense chargeable to ore mined in the Conkling ground during the calendar year 1915 was as follows:

Mining 2,902.4 T. @ \$4.50 per ton.....	13,060.80
Milling 2,804 " @ \$1.20 " "	3,364.80
Sampling & Trimming 98.4 T. Shipping Ore @ 62.9¢.....	61.89
Sampling & Trimming 500.3 T. Concentrates @ 62.9¢.....	371.25

Development expenditure within Conkling Ground:

Drifting 39 ft. @ \$12 per ft.....	468.00
Raise 1 comp. 15 ft. @ \$10 per ft.....	150.00
" 3 " 52 " @ \$25 " "	1,200.00
" 1 " 16 " @ \$10 " "	160.00
	<hr/> 18,936.74

Excess cost of ore..... 818.02

121

Interest at 8% for year 1915 on \$67,953.97 (Balance at Jan. 1, 1915, exclusive of interest).....	5,412.31	
	<hr/>	4,504.29

Balance in favor of Conkling claim at Dec. 31, 1915, (Principal \$66,835.95, Interest \$31,440.12)..... \$98,276.07

The Ore mined from the Conkling ground for three months to Mar. 31, 1916, did not exceed the following weights and the value thereof did not exceed \$7.41 per ton of Milling Ore, which value is hereby placed on same:

No shipping ore extracted from Conkling claim
1,074 tons milling ore @ \$7.41 per ton..... 7,958.34

The expense chargeable to ore mined in the Conkling ground during three months ending Mar. 31, 1916, is as follows:

Mining 1,074 tons @ \$4.50 per ton.....	4,833.00
Milling 1,074 " @ \$1.20 " "	1,288.80
Sampling & Trimming 226.1 T. Concentrates @ 62.9¢.....	142.20

Development work within Conkling ground:

Drifting 115 ft. @ \$12. per ft.....	1,380.00	7,644.00
Net proceeds ore.....		24.34

(Page 5 continued:)

Interest at 8% per annum for 3 months to Mar. 31, 1916, on \$96,855.95 (balance at Jan. 1, 1916, exclusive of Int.).....	1,236.72	1,651.06
Balance in favor of Conkling claim at Mar. 31, 1916 (Principal \$67,150.29, Int. \$32,776.84).....		99,927.13
Int. @ 8% per annum from Mar. 31, 1916, to Mar. 1, 1917, on principal balance of \$67,150.29 at Mar. 31, 1916.....		4,934.35
Balance in favor of Conkling claim at Mar. 1, 1917.....		\$104,851.48

Of the balance of \$104,851.48 in favor of the Conkling claim at March 1, 1917, there is due to the Conkling Mining Co. a three-fourths interest, which amounts to \$78,638.61.

NOTE.—The ratio of concentration for the period from Apr. 1, 1913, to March 31, 1916, is 4.75 tons of crude milling ore into 1 ton of concentrates.

SILVER KING COALITION MINES
COMPANY,

By F. J. WESTCOTT,

Secretary.

SCHEDULE 1.

During the period from May 1, 1907, to June 30, 1910, the defendant had invested in Mine and Mine Buildings and Machinery and Tools and Tramway, a total of \$402,598.00, as follows:

Mine buildings.....	\$60,004.00
" Machinery	49,306.00
" Blacksmith Shop	5,861.00
" Carpenter Shop	1,361.00
122	
Sampler buildings and Machinery.....	88,876.00
" Main tramway.....	41,120.00
Upper Coal Bin.....	3,742.00
Lower Terminal.....	27,781.00
Water and Fire System.....	27,745.00
Total	314,625.00

Mill Building and Machinery.....	\$145,212.00
" Machine Shop.....	2,081.00
Total Building, Machinery and Equipment.....	147,293.00
	\$402,568.00

All of which buildings, machinery, trams, etc., were used and necessarily used in the mining, extraction, treatment, and marketing of the ores taken from the Conkling ground.

Interest at 8% per annum on the above expenditure should properly be charged against all ore mined and milled except that shipping (or first class) ore should not be charged with interest on Mill Expenditure. Such a charge from May 1, 1907, to June 30, 1910, would be as follows:

	Interest at 8% on \$314,926.00	Interest at 8% on \$147,293.00
8 months 1907.....	\$16,783.73	\$7,887.63
12 months 1908.....	25,175.00	11,831.44
12 months 1909.....	25,175.00	11,831.44
6 months 1910.....	12,587.50	5,915.72

The following summary shows the total ore extracted each year from all of its properties, including that extracted from the Conkling claim, and the proportion of the above charge to be made to each ton:

Extracted.	Tons.	Interest.	Rate per ton.
1907	32,582	\$16,783.73	51c
1908	40,710	25,175.00	61c
1909	54,547	25,175.00	46c
1910	20,607	12,587.50	61c
Milled.			
1907	19,300	7,887.63	41c
1908	22,812	11,831.44	52c
1909	31,290	11,831.44	38c
1910	14,387	5,915.72	41c

The tonnage extracted from the Conkling ground and the interest chargeable thereto is as follows:

Shipping Ore:

1907	1,629.5 Tons @ 51c.....	\$835.04
1908	1,240.5 " @ 61c.....	762.19
1909	703 " @ 46c.....	320.98
1910	150 " @ 61c.....	91.50

Total **\$2,009.37**

122 Milling Ore:

1907	3,379	"	@ 92¢.....	3,108.68
1908	2,406	"	@ \$1.13.....	2,822.74
1909	8,011	"	@ \$0.84.....	6,729.24
1910	1,638	"	@ \$1.02.....	1,670.76

Total 14,331.42

Grand total May 1, 1907, to June 30, 1910.. \$16,370.70

The trial upon the accounting came on before this Honorable Court on the — day of May, 1917, Honorable Tillman D. Johnson, presiding, and the following proceedings were had:

(Defendant's Amended Statement of Account as to Ore Mined from Conkling Mining Claim, etc., Filed by Leave of Court May 14, 1917.)

Comes now the defendant above-named, and by leave of the court, makes and files the following amended statement of account, showing the tonnage and value per ton of all shipping ore mined by it from the Conkling Mining claim mentioned in the complaint (according to the description of said claim contained in the patent thereto); also the cost to defendant per ton for mining, milling, tramming and sampling the crude or shipping ore; also the tonnage and value per ton of all milling ore mined by defendant from said Conkling mining claim, and the cost to it per ton for mining, milling, sampling and tramming the said milling ore; also moneys expended by defendant and its predecessors in interest, the Kearns-Keith Mining Company (named in plaintiff's bill of complaint), in exploratory and development work in search of ore in the Conkling and Arthur mining claims (mentioned in said complaint) and which resulted in the discovery of all ores heretofore mined by said defendant from said common property.

Filed May 14, 1917.

JOHN W. CHRISTY,
Clerk.

Development Work Done by Silver King Co. in Conkling and Arthur Claims.

Year.

1902.	Cleaned out and in places retimbered Crescent Drift a distance of 2,079.5 ft. easterly from a point which is 65 ft. easterly from the west end line of the Arthur claim, at a cost per foot of \$3.00.....	\$6,238.50
1914	Drifting all in Arthur claim, 90 ft. @ \$12 per ft.	1,080.00
		<hr/> \$7,318.50 <hr/>

Int. on \$7,318.50 @ 8% from Jan. 1, 1903, to May 1, 1907		\$2,537.08
1903. Drifting, 154 ft. within Arthur claim, @ \$15.38		
per ft.	\$2,368.52	
Drifting 1,071 ft. within Conkling claim @ \$15.38 per ft.	16,471.98	
	<hr/>	
	\$18,840.50	
Int. on \$18,840.50 @ 8% from Jan. 1, 1904, to May 1, 1907.		<hr/>
		\$5,024.12
1904. Drifting, all within Conkling claim, 903 ft. :		
60 ft. @ \$54.073 per ft.	\$3,244.38	
468 ft. @ \$26.186 " "	12,255.05	
375 ft. @ \$15.38 " "	5,767.50	
	<hr/>	
	\$21,266.93	
Int. on \$21,266.93 @ 8% from Jan. 1, 1905, to May 1, 1907.		<hr/>
		3,969.82
1905. Drifting, all within Conkling claim, 380 ft. :		
250 ft. @ \$26.186 per ft.	\$6,546.50	
130 ft. @ \$12.00 " "	1,560.00	
	<hr/>	
	\$8,106.50	
Int. on \$8,106.50 @ 8% from Jan. 1, 1906, to May 1, 1907.		<hr/>
		864.68
1906. Drifting, all within Conkling claim, 326 ft. @ \$12.00 per ft.	\$3,912.00	
Int. on \$3,912.00 @ 8% from Jan. 1, 1907, to May 1, 1907.		<hr/>
		104.32
1907. Drifting, all within Conkling claim, 140 ft. @ \$12.00 per foot, completed before June 1, 1907	\$1,680.00	
	<hr/>	
	\$61,124.43	<hr/>
		\$12,500.02
Total expenditure and Interest to May 1, 1907.		<hr/>
		\$73,624.45
Less Interest included paid from ore proceeds as below ...		<hr/>
		12,500.02
		<hr/>
		\$61,124.43

No ore was mined and removed from the Conkling ground prior to May 1, 1907. Between that date and June 30, 1910, the Silver King Coalition Mines Co. mined not to exceed the tonnage stated below from the said Conkling ground, and the gross value 125 per ton, less freight and treatment charges, did not exceed \$32.25 for First Class or Shipping Ore, and \$11.70 per ton for Milling Ore.

The ore mined from the Conkling Ground from May 1, 1907, to December 31, 1907, and the value thereof at the above rates, was as follows:

Carried Forward	\$61,124.43
Brought Forward	\$61,124.43
1,613 Tons shipping ore, 3,226 Tons Milling Ore—	
Value	\$89,763.45

The expense chargeable to ore mined in the Conkling Ground in 1907 was as follows:

Mining 4,839 tons @ \$6.00 per ton.....	\$29,034.00
Milling 3,226 " @ \$1.82 " "	5,871.32
Sampling & Trammig 1,613 T. Shipping Ore @ 62.9¢	1,014.58
Sampling & Trammig 921.7 T. Concentrates @ 62.9¢	579.75

Development Expenditure within Conkling claim:

91 ft. @ \$15.38 per ft.—Drifting.....	1,399.58
73 ft. @ \$12.00 per ft.— "	876.00
43½ ft. @ \$10.00 " " — "	435.00
59 ft. @ \$25.00 " " —3 Compart. Raise	1,475.00
15 ft. @ \$10.00 " " —1 "	150.00
	<hr/> 40,835.23

Net proceeds.....	48,928.22
Less Int. to May 1, 1907, applied against proceeds..	12,500.02
	<hr/> 36,428.20
Balance due defendant company at Dec. 31, 1907.....	24,696.23

The ore mined from the Conkling ground during the year 1908, and the value thereof at the afore-stated rates, was as follows:

1,197.5 Tons Shipping Ore, 2,385 Tons Milling Ore—	
Value	\$66,523.87

The expense chargeable to ore mined in the Conkling ground in 1908 was as follows:

Mining 3,582.5 tons @ \$6.00 per ton.....	\$21,495.00
Milling 2,385.0 " @ \$1.82 " "	4,340.70
Sampling & Trammig 1,197.5 T. Shipping Ore @ 62.9¢	753.22
Sampling & Trammig 681.4 T. Concentrates @ 62.9¢	428.60

Development expenditure within Conkling ground:

Drifting 14 ft. @ \$26.186 per ft.....	366.60	
" 96 ft. @ \$15.36 " ".....	1,474.56	
" 120 ft. @ \$12.00 " ".....	1,440.00	
Switch and Powder magazine equal to 61 ft. @ \$10.....	610.00	
126		
Raise — 2 compartment — 15 ft. @ \$18 per ft.....	270.00	
	<hr/>	31,178.68
		<hr/>
		35,345.19
Less Int. from Jan. 1, 1908, to Dec. 31, 1908, on balance of \$24,696.23 at 8%.....	1,975.70	
	<hr/>	33,369.49

Balance in favor of Conkling claim at Dec. 31, 1908 (less Int. on account of Improvements as hereinafter shown). \$8,673.26

The ore mined from the Conkling ground during the year 1909, and the value thereof at the afore-stated rates was as follows:

860 tons shipping ore, 6,881 tons milling ore—value.. \$108,242.70

The expense chargeable to ore mined in the Conkling ground in 1909 was as follows:

Mining 7,741 tons @ \$5.07 per ton.....	\$39,246.87
Milling 6,881 " @ \$1.24 " ".....	8,532.44
Sampling & Tramming 860 T. Shipping Ore @ 62.9¢.....	540.94
Sampling & Tramming 1,966 T. Concentrates @ 62.9¢.....	1,236.61

Development expenditure within Conkling ground:

Drifting 90 ft. @ \$10. per ft.....	900.00	
	<hr/>	50,456.86
		<hr/>
Net proceeds ore.....		57,785.84
Add 1 year's interest at 8% on \$8,673.26 balance in favor of Conkling claim at Jan. 1, 1909.....		693.86

(Continued.)

Balance in favor of Conkling Claim at Dec. 31, 1909 (less interest on account of improvements as hereinafter shown)..... \$67,152.96

The ore mined from the Conkling ground for 6 months to June 30, 1910, and the value thereof at the aforestated rates, was as follows:

242 tons shipping ore, 1,937 tons Milling Ore—Value. 30,467.40

The expense chargeable to ore mined in the Conkling ground from Jan. 1, 1910, to June 30, 1910, was as follows:

Carried Forward.....	\$30,467.40	\$67,152.96
Brought Forward.....	\$30,467.40	\$67,152.96
Mining 2,179 tons @ \$5.30 per ton.....	\$11,548.70	
Milling 1,937 " @ 1.22 " ".....	2,363.14	
Sampling & Trammings 242 T. Shipping Ore @ 62.9¢.....	152.22	
Sampling & Trammings 553 T. Concentrates @ 62.9¢.....	347.84	
	<u>14,411.90</u>	
Net proceeds ore.....	16,055.50	
127		
Add 6 months' Interest @ 8% on \$66,459.10 (balance at Dec. 31, 1909, less \$693.86 Int. included therein)	2,658.36	
		<u>18,713.86</u>
		\$85,866.82

From said sum of \$85,866.82 the defendant claims that there is to be deducted a sum of \$15,505.07 on account of interest rateably chargeable to the Conkling Claim on moneys invested by defendant in its mine and mill buildings, machinery, tools, tramways, etc. (all of which were used, and necessarily used, in the mining, extraction, treatment, and marketing of ores taken by defendant from the Conkling claim), as shown by Schedule 1, hereto annexed, leaving a balance of \$70,361.75.

In the foregoing computations the ratio of concentration adopted is that of 3½ tons of crude milling ore into 1 ton of concentrates.

No work was undertaken in the Conkling ground during the period from June 30, 1910, to Apr. 1, 1913, and no ore was extracted or sold therefrom.

The balance in favor of the Conkling claim at June 30, 1910 was (as heretofore shown).....	70,361.75
Interest at 8% per annum from July 1, 1910, to December 31, 1912, on \$70,361.75.....	14,072.35

Balance in favor of Conkling Claim at Apr. 1, 1913 (Principal \$70,361.75, Int. \$14,072.35).....	\$84,434.10
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The ore mined from the Conkling ground from Apr. 1, 1913, to Dec. 31, 1913, did not exceed the following, and the value thereof did not exceed \$32.25 per ton of Shipping ore and \$4.81 per ton of milling ore, which values are hereby placed on same:

68 Tons Shipping Ore, 272 T. Milling Ore—Value... \$3,501.32

The expense chargeable to ore mined on the Conkling ground from Apr. 1, 1913, to Dec. 31, 1913, is as follows:

Mining 540 tons @ \$4.50 per ton.....	\$1,530.00
Milling 272 " @ .91 " ".....	247.52
Sampling & Trimming 68 T. Shipping Ore @ 62.9¢.....	42.77
Sampling & Trimming 57 T. Concen- trates @ 62.9¢.....	35.85

Development expenditure within Conkling ground:

102 ft. of drifting @ \$12.00 per ft.....	1,944.00
	<u>3,800.14</u>

Excess cost of ore.....	\$298.82
Add Interest @ 8% from Jan. 1, 1913, to Dec. 31, 1913, on \$70,361.75 balance (exclusive of interest) in favor of Conkling claim at Dec. 31, 1912.....	5,628.94

Net additional credit.....	\$5,330.12
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128

Balance in favor of Conkling claim at Dec. 31, 1913 (Principal \$70,062.93, Int. \$19,701.29).....	89,764.22
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The ore mined from the Conkling ground for the calendar year 1914 did not exceed the following weights and the value thereof did not exceed \$32.25 per ton of Shipping Ore, and \$4.59 per ton of Milling Ore, which values are hereby placed on same.

127 Tons shipping ore, 1,143 Tons Milling Ore—Value \$9,342.12

The expense chargeable to ore mined in the Conkling ground during the calendar year 1914 is as follows:

Carry forward.....	\$9,342.12	\$89,764.22
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Brought Forward.....	\$9,342.12	\$89,764.22
Mining 1,143 tons @ 4.50 per ton.....	\$5,715.00	
Milling 1,143 " @ (-).15 " ".....	1,314.45	
Sampling & Trimming 127 T. Shipping ore @ 62.9¢.....	79.88	
Sampling & Trimming 240.6 T. Concentrates @ 62.9¢.....	151.33	
Development expenditure within Conkling ground:		
Drifting 334 ft. @ \$12. per ft.....	4,008.00	
Drifting 102 ft. @ \$15. per ft.....	1,530.00	
Raise equal to 15 ft. 3 comp. @ \$25 per ft.	375.00	
Station at top of raise from 600 level equal to 58 ft. of drifting at \$10 per ft.	580.00	
	<hr/>	13,753.08
Excess cost of ore.....	4,411.54	
Int. @ 8% for calendar year 1914 on \$70,062.93 (Bal. at Jan. 1, 1914, exclusive of interest).....	5,005.03	
	<hr/>	1,193.49
Balance in favor of Conkling claim at Dec. 31, 1914 (Principal \$65,651.39, Interest \$25,306.32).....		90,957.71

The ore mined from the Conkling ground for the calendar year 1915 did not exceed the following weights and the value thereof did not exceed \$32.25 per ton of shipping ore and \$5.33 per ton of milling ore, which values are hereby placed on same:

98.4 tons shipping ore, 2,804 tons milling ore, value. 18,118.72

The expense chargeable to ore mined in the Conkling ground during the calendar year 1915 was as follows:

Mining 2,902.4 T. @ \$4.50 per ton.....	\$13,060.80
Milling 2,804 T. @ \$2.59 per ton.....	7,262.36
Sampling & Trimming 98.4 T. Shipping Ore @ 62.9¢.....	61.89
Sampling & Trimming 500.3 T. Concentrates @ 62.9¢.....	371.30

Development expenditure within Conkling ground:

120		
Drifting 39 ft. @ \$12 per ft.....	468.00	
Raise 1 comp. 15 ft. @ \$10 per ft.....	150.00	
“ 3 “ 52 ft. @ 25 “ “.....	1,300.00	
“ 1 “ 16 “ @ 10 “ “.....	160.00	
	<hr/>	22,834.35
Excess cost of ore.....	4,715.63	
Interest @ 8% for year 1915 on \$65,651.39 (balance at Jan. 1, 1915, exclusive of interest).....	5,252.11	
	<hr/>	536.48
Balance in favor of Conkling claim at Dec. 31, 1915 (Principal \$60,935.76, Interest \$30,558.43).....		\$91,494.19

The ore mined from the Conkling ground for three months to March 31, 1916, did not exceed the following weights, and the value thereof did not exceed \$7.41 per ton of Milling ore, which value is hereby placed on same.

No shipping ore was extracted from the Conkling claim.

1,074 tons milling ore @ \$7.41 per ton.. \$7,958.34

The expense chargeable to ore mined in the Conkling ground during 3 months ending Mar. 31, 1916, is as follows:

Mining 1,074 tons @ \$4.50 per ton.....	\$4,833.00
Milling 1,074 tons @ \$2.49 “ “.....	2,674.26
Sampling & Trimming 226.1 T. Concentrates @ 62.9¢.....	142.22

Development work within Conkling ground:

Drifting 115 ft. @ \$12 per ft.....	1,380.00	
	<hr/>	9,029.48
Excess cost of ore.....		1,071.14
Interest @ 8% per annum for 3 months to Mar. 31, 1916, on \$60,935.76 (balance at Jan. 1, 1916, exclusive of interest).....		1,218.71
	<hr/>	147.57
Balance in favor of Conkling claim at Mar. 31, 1916 (Principal \$59,864.62, Interest \$31,777.14).....		\$91,641.76
Int. @ 8% per annum from Mar. 31, 1916, to May 14, 1917, on Principal balance of \$59,864.62 at Mar. 31, 1916.....		5,359.25

Balance in favor of Conkling claim at May 14, 1917..... 97,001.01

Of the balance of \$97,001.01 in favor of the Conkling claim at May 14, 1917, there is due to the Conkling Mining Co. a three-fourths interest, which amounts to \$72,750.76.

NOTE.—The ratio of concentration for the period from April 1, 1913, to March 31, 1916, is 4.75 tons of crude milling ore into 1 ton of concentrates.

SILVER KING COALITION MINES
COMPANY,

By F. J. WESTCOTT,

Secretary.

130

SCHEDULE 1.

During the period from May 1, 1907, to June 30, 1910, the defendant had invested in Mine and Mine Buildings and Machinery and Tools and Tramway a total of \$462,588.00, as follows:

Mine Buildings	\$69,094.00
" Machinery	49,306.00
" Blacksmith shop	5,861.00
" Carpenter Shop	1,161.00
Sampler Buildings and Machinery	88,876.00
Main Tramway	41,129.00
Upper Coal Bin	3,742.00
Lower Terminal	27,781.00
Water and Fire System	27,745.00
Total	314,695.00
 Mill Building and Machinery	 \$145,212.00
" Machine Shop	2,681.00
	<hr/> 147,893.00
Total Building, Machinery and Equipment	\$462,588.00

All of which buildings, machinery, trams, etc., were used, and necessarily used, in the mining, extraction, treatment and marketing of the ores taken from the Conkling ground.

Interest at 8% per annum on the above expenditure should properly be charged against all ore mined and milled except that shipping (or first class) ore should not be charged with interest on Mill Expenditure. Such a charge from May 1, 1907, to June 30, 1910, would be as follows:

	Interest at 8% on \$314,695.00	Interest at 8% on \$147,893.00
8 months 1907	\$16,783.73	\$7,887.63
12 " 1908	25,175.60	11,831.44
12 " 1909	25,175.60	11,831.44
6 " 1910	12,587.80	5,915.72

The following summary shows the total ore extracted each year from all of its properties, including that extracted from the Conkling claim, and the proportion of the above charge to be made to each ton:

Extracted.	Tons.	Interest.	Rate per ton.
1907	32,532	\$16,783.73	51¢
1908	40,710	25,175.00	61¢
1909	54,547	25,175.00	46¢
1910	20,607	12,587.80	61¢
Milled.			
1907	19,360	7,887.63	41¢
1908	22,912	11,831.44	52¢
1909	31,286	11,831.44	38¢
1910	14,302	5,915.72	41¢

The tonnage extracted from the Conkling ground and the interest charge thereon is as follows:

Shipping Ore.

1907	1,613	Tons @ 51¢.....	822.63
1908	1,197.5	" @ 61¢.....	729.47
1909	800	" @ 46¢.....	365.00
1910	242	" @ 61¢.....	147.62

Total \$2,086.32

Milling Ore.

1907	3,226	Tons @ 92¢.....	2,967.02
1908	2,385	" @ 1.13.....	2,695.05
1909	6,881	" @ 0.84.....	5,780.04
1910	1,937	" @ 1.02.....	1,975.74

Total \$13,418.75

Grand Total May 1, 1907, to June 30,
1910 \$15,505.07

The hearing commenced Monday, May 14, 1917, and the following proceedings were had:

(Defendant Granted Leave to File Amended Statement of Account.)

Mr. Dickson: I ask leave, if your Honor please, to file an amended account; the amendments I have called Mr. Critchlow's attention to, some of them are due to errors that I got into in making computations, some of which are to our advantage and some of them are to the advantage of the Conkling Mining Company. I think they nearly cancel each other. There is one error though in the cost per

ton in mining during the years 1915 and 1916, which accounts for the principal difference in the amount which we allege to be due to the complainant.

The Court: It may be filed.

Mr. Dickson: In 1907 in the account heretofore filed I had 1,029½ tons of first class ore. That should be 1,613 tons of first class ore.

I had 3,379 tons of second class; that should be 3,226.

In 1908, in the statement heretofore filed, I had 1,249½ tons of first class which should be 1,197½ tons.

I had 2,498 tons of second class; should be 2,385.

In 1909 I had 763 tons of first class; it should be 860 tons.

I had 8,011 tons second class; should be 6,681.

In 1909 I had 156 tons first class; which should be 242 tons.

I had 1,638 tons of second class; should be 1,937.

132

(Testimony for Defendant.)

CHARLES P. BROOKS, a witness for the defendant, testified as follows:

My name is Charles P. Brooks. I am 65 years old and by occupation a civil and mining engineer. I graduated from the Sheffield Scientific School, Yale College in 1870, and have practiced my profession continuously ever since.

(At this point maps were marked by the reporter exhibits 1 to 20, inclusive).

(Witness, continuing:) Maps from 1 to 20 have mostly been plated from the notes of surveys made by myself. Some of the notes were made by Mr. Anderson, engineer for the plaintiff Company.

Map "A" Conkling Mining Company vs. Silver King Coalition Mines Company showing the development work done for the Conkling and Arthur claims 1902; April 1916, scale 50 feet to the inch. The Conkling is represented by two lines—black and red. The red lines represent the ground as marked by the monuments, the black lines according to the calls in the patent.

At the point marked Station 660 and drift, the main Alliance tunnel runs to the southwest to a point marked drift, started October 27, 1908, which is the Teddy drift connecting with the Silver Hill Station. There is a drift running from the Silver Hill shaft back to the east connecting with the Elephant stope. * * * Part of the Conkling as described in its patent has been patented to the U. J. Wenner. It is shown on the map in pink.

There is a small triangular piece colored blue, survey No. 6157 patented to the Show-Me lode. There is also a large strip colored yellow, in which occur the figures "24,850," which is a portion of the Custer No. 2 lode, survey No. 4850.

(It was here stipulated that the Custer No. 2 and the Silver Hill claims are the properties of the defendants.)

The conflict with the Silver Hill No. 4, survey 4850 is shown on the map by the area colored green.

Exhibit No. 2 is marked "Conkling Mining Company vs. Silver King Coalition Mines Company, Sheet No. 1,—showing 1905 to, 1910 work. * * * It also includes all the stoping between those dates which I have any note of, and some stoping put on from Mr.

Anderson's notes.

133 The west line of the Conkling is represented on this map by the heavy black line running between posts 3 and 4. This is the Conkling according to United States patent.

The red line marks the west end line of the Conkling according to the posts on the ground. The space between the black end line and the red line marks the 135.5 foot strip difference between patent calls and posts.

Referring to the time stoping commenced in the ground in controversy in 1907, I will say that I was really in there in 1905, at the beginning of this crosscut, on February 20, 1905; McKay crosscut November 23, 1906; June 2, 1907; August 3, 1907; December 4, 1907; January 29, 1908; April 13, 1908; August 24, 1908; September 29, 1908; October 27, 1908; January 8, 1909; March 19, 1909; April 30, 1909; June 22, 1909; August 2, 1909; September 21, 1909; March 8, 1910; March 10, 1910; April 30, 1910; June 13, 1910; May 4, 1912; May 2, 1914; October 4, 1914; April 13, 1916; April 15, 1916.

During all the time from 1901, until the middle of May, 1907, I was employed as the regular mining engineer of the parties operating these properties. I worked for the Kearns-Keith Company and for the present defendant. The Kearns-Keith Company was the predecessor in interest of this defendant. I have been in charge of the survey underground for the present defendant since it was incorporated in May, 1907.

My last survey in 1907, in the Elephant stope, was made December 4th. The stoping had then been extended as indicated by the full lines marked around the stope, with a broken and dotted line going across the stope in an irregular manner from the point near which the section 8 line cuts the south side of the stope, and running northwesterly to a point near where the section 5 line cuts the northerly side of what is known as the Elephant stope; and it is marked "December 4, 1907;" up to December 4, 1907, I have calculated that the cubic contents of earth and rock removed equals 50,000 cubic feet.

My last survey made in the year 1908, was October 27th. The face at that date is indicated by a very irregular line, starting at the point marked "Chute Station 3041," just west of the west end line of the Conkling as patented; there is a broken and dotted line with five dots on it running to the southwest, and the first part of that line is marked "September 29, 1908," but near the end of it

134 shows the line continuing on and marked "October 27, 1908." Following that line you come back on the side of the drift and go to the south and it is marked again "October 27, 1908." The extent of the excavation in this ore body between the date of the last

survey in 1907 (December 4th), and the last survey in 1908, (October 27th) was 37,120 cubic feet.

My first survey in the ore body in 1909, was January 8th, and my last survey in the ore body in that same year was September 21st.

I have endeavored to ascertain the number of cubic feet of material extracted from this ore body between October 27, 1908, and September 21, 1909. It equals 104,295 cubic feet.

My first survey in 1910, was March 8th. My last survey in that year, June 13th. There is indicated on the map the lines of the survey showing the faces on the slope on June 13, 1910. I have endeavored to ascertain the extent of the excavation from this ground between the last survey in 1909, namely, September 21, and my last survey in 1910, namely, June 13th, and I find it to be 29,355 cubic feet. This 29,355 cubic feet came out of what is marked on this map and colored "Salmon color incline slope," practically all of it.

My next survey where ore was extracted I think was made in 1913. I now refer to plaintiff's exhibit 3. It is marked "Sheet No. 2," which shows workings below tunnel level and stoping done in 1912—April, 1916.

There is no survey of any excavation having been made in 1912. I have a computation from my surveys of the extent of excavating from the ore body in the year 1913; it is 4,505 cubic feet and it came from what is known as the Toole slope; which is off what is known as the Toole drift.

There was stoping done in the Receiver's slope in 1914. This Receiver's slope starts off from what is known as the McKay cross-cut and drift, running to the Silver Hill shaft, and is practically on the level of the Elephant slope at that point. It goes down on an incline to the northeast under the Elephant slope, breaking into it in one or two places, as is shown by the note on the map at the point marked "Square,"—breaks into the Elephant slope.

I have ascertained the number of cubic feet of material removed from the Receiver's slope in 1914, at 18,246 cubic feet.

There was no ore stoped or material excavated within the Conklings claim in the years 1913 or 1914, except what I have given you.

135 Q. Well, there was some ore taken in 1914, from the 600 slope, wasn't there?

A. I don't think there was.

On July 20, 1914, was my first survey of the 600 foot level. It was in then 222 feet from the shaft.

On October 22, 1912, the Silver Hill shaft was down 94½ feet.

January 15, 1913, the shaft was down 161 feet and the 600 foot level had just then been started. My next survey of that drift (the 600) was July 20, 1914. The face at that date is marked on the map by an arrow—222 feet from the shaft. It had not then reached the ore body, although they were close to it. [The-] started a small slope right in the body of what is now known as the 600 foot slope. It is indicated by a small pencil date; I put it there, October 4, 1914. That was the first measurement I made of any

stoping that had been done on the 600 level. My last survey for the year 1914, was October 3rd.

My first survey in 1915, made in the 600 stope was January 20th.

I have ascertained or endeavored to ascertain the number of cubic feet of material that had been mined from that 600 foot stope in the year 1915.

There is shown on the map 600 top stope so marked, colored yellow; from that 22,148 cubic feet; "600 middle stope" 16,692 cubic feet; "700 drift stope," 3,402 cubic feet, making a total of 42,242 cubic feet from the 600 level during the year 1915. The total of 42,242 cubic feet includes all the ore much or little that was taken from the stope in the latter part of 1915; that includes all the stope up to the end of 1915.

My last survey made of the stope within the Conkling ground, 600 level in 1916, was April 13, made in connection with Mr. Anderson. There was excavated from the Conkling in the year 1916, as follows: 600 top stope, 14,595 cubic feet; 704 raise, 1,815 cubic feet; total 16,410 cubic feet from the Conkling in 1916.

I will describe the Elephant stope which is on Exhibit 2, colored blue, giving its heights at intervals; heights taken shown on the sections. On this exhibit 2 there is a stope marked "Bench stope." This stope is an excavation of 33,500 cubic feet; the joint survey stope, 9,861 cubic feet; the Hat stope, 9,150 cubic feet—referring to the portion of the Hat stope within the Conkling; the Chute stope, 31,165 cubic feet; the Incline stope, 29,355 cubic feet; the 136 Chippie Drift stope, 30,480 cubic feet. The Elephant stope so far as it is within the Conkling, 77,259 cubic feet.

600 top stope on Exhibit 3, 36,743 cubic feet; 600 middle stope, 16,692; 700 drift stope, 3,402; 704 raise stope, 1,815. There is a connection between the Elephant stope and the 600 stope. The raise from the 600 broke into the McKay crosscut at the point marked "Raise from 600 to McKay drift." (Transcript Page 24).

Referring to exhibit 2 again, the Elephant stope is shown starting on the tunnel level or the level of the McKay crosscut. The highest stoping shown on exhibit 2 is the Hat stope about 50 feet above the tunnel level.

The vertical distance from the surface immediately above the Elephant stope down to the tunnel level which runs into the stope is 1367 feet.

I have now in my possession the books for 1913 and '14, which show that the first survey I ever made in the Receiver stope was on October 4, 1914. They were working in it at that time. I made no survey in 1913. If they did any work in the Receiver's stope in 1913, I don't know of it. I did not make any survey in the Receiver's stope after October 4, 1914. The work had then progressed as is indicated by a dotted line dated October 4, 1914. The stoping then had included practically all of the Receiver's stope.

We will go back to exhibit 1. I made my first survey in what is marked here "South cross-cut, Crescent drift, Alliance tunnel," February 28, 1903—well, there is one marked here "December 1, 1902"; after the Kearns-Keith Company had acquired title they

had some work done in this line of work called the Crescent drift, Alliance tunnel and South crosscut. It consisted of cleaning up the track, relaying the track, putting new ties and timbers in and retimbering a number of places that had caved seriously driving spiling through. That work commenced practically at Station 131.

The K-K Company took up the new work first. I do not mean cleaning out, but driving the tunnel ahead at a point indicated by a little red arrow with the station marked 166 plus 13.8, and with a block point marked "face October 30, 1891," with also two arrows indicating the distance back from the westerly side line of the Arthur claim 65 feet. I think their first work was done to the north in that Crescent drift; that was December, 1902. That would be from Station 166 to Station 1156 plus 22; that was driven by the K-K Company. That distance within the Arthur claim is 90½ feet.

From Station 1173 plus 11½—from that point out to Station 1174 is 89 feet. From the line of the west line of the Arthur down to where the work connects with the main tunnel is about 45 feet; from where it connects with the tunnel to the southerly face where you find the date February 28, 1903, is 29½ feet.

From station 1176 to Station 1177-a is about 50 feet. From 1177-a northerly to where we have the date February 28, 1903, is 15½ feet.

Coming back to station where the face was when Treweek left off, October 30, 1891, from that face westerly to station 1176 is 100 feet. From station 1177-a westerly to station 577 plus 6 is about 879 feet.

Taking the distance from station 577 plus 6 back to station 1174 plus 11, that distance would be 974 feet.

I made my first survey in there after the K-K Company took charge in December, 1902. The next one was February 28, 1903; the next one June 22, 1903; the next one is marked July 23, 1904—just west of station 601.

In making my computation of the work done under the K-K management, I have not included anything outside of the line of the Conkling as described in the patent.

I will give the distances from station 557 in a westerly direction taking in the little cross-cut as I go along. From station 577 plus 6 to 604 plus 25 equals 207 feet, heavy ground, timbered and spiled. I have it so marked on the map there.

From 607 plus 25—at 601 there is a drift running to the south-east 56 feet, designated at the face "October 18, 1904."

From station 601 plus 10 there is a drift running a little south-westerly 38 feet and marked "October 18, 1904." February 20, 1905, B. H. at the end standing for bulkhead," to hold the water back. That is also all within the Conkling.

Starting from 604 plus 25, from there to 605 plus 10, it is 60 feet, at which point a drift starts off marked "drilled hole drift." Of this I have included just what lies within the Conkling claim. That portion is about 15 feet.

From 605 plus 10 to 660 equals 200 feet, heavy ground, tim-

bered and spiled; 660 is right at the mouth of the McKay cross-cut.

138 From 660 to 664 which is on the end line of the Conkling as described in the patent, is a distance of 185 feet.

At station 661 from the main drift a drift to the right, 65 feet, is run, marked "February 20, 1905."

Coming back to station 660, at which point the McKay cross-cut so marked leaves the main line of workings easterly and westerly, we have, running from 660 to 660 plus 30, 130 feet marked January 1, 1906. That is not really the date of my survey because that work was being driven right through, and the date of my surveys put there in black, February 20, June 11, and that interpolated; divided it up in that time, running up to that date.

I was trying to comply with counsel's request to give the amount of work done in each calendar year, and that is the only way we could do it interpolating between the two dates proportionately.

February 20, 1905, it was at the point marked in black "February 20, 1905"; June 1, 1906, it was at the point marked in black right under the letter "K" in McKay. Between those points I have approximated the face as it was on January 1, 1906.

From January 1, 1906, to January 1, 1907, is 284 feet. I did not make a survey January 1, 1907. I made one June 11, 1906, September 6, 1906, June 2, 1907.

I have indicated the face as nearly as I could approximate it on the first of January, 1906.

From 1907, January 1st,—to January 1, 1908—there is 91 feet driven on the McKay cross-cut indicated by Station 1994 plus 10, January 1, 1908, approximate; just below station 1994 seems to be 96 feet to the point marked. That would be done in January 1, 1908, and prior to 1909; it would be 96 feet at the point marked station 2010; the drift runs off 110 feet to station 3039 plus 10, which brings you to the west end line of the Conkling as described in the patent. There is a little piece of drift running out from station 3037 westerly where we have the date August 24, 1908, 35 feet.

From station 3037 to 367 distance of the drift proper is 40 feet; the other part was left out because it was included in the stope. This colored white from station 1879 plus 10 back to station 3037 plus 35 is left out because it is in the stope.

From station 367 there is a little drift running west 33 feet.

139 From station 1856 plus 44 easterly to the McKay cross-cut is 42 feet.

Easterly to the face where we have the mark June 2, 1907, is 140 feet.

From station 462 in a southwesterly direction is 52 feet.

Coming to station 2247 there is a little piece of colored drift running north to the date April 30, 1909, that is 19 feet; then from station 2285 plus 10 northerly is 38 feet.

I have here a list of development work done for the Conkling and Arthur claims, April 1902, to April, 1916. It gives by years the footage with a description of the stations from one station to another.

It includes the time beginning in 1902, when the Crescent drift was cleaned out and retimbered, down to April 1916. * * *

My first survey in the Toolé drift was May 2, 1914. I have given you in the account for the year 1913, 162 feet of drifting; it is made up of 52 feet of what is known as the Toole drift; that was done in 1913; my survey was in 1914, and I was informed it was done in 1913.

The Engine drift is shown on exhibit 4. All that part of it east of the Columbia raise was done in 1913; and from station 2612-C at that point southwesterly to the connection with the old drift 110 feet total, making 162 feet.

In 1914, I have given the work as drifting 334 feet in one place, drifting 102 feet in another place. Referring to this drifting, 334 feet in 1914, that was the Custer drift from station 2612-M running westerly from the Columbia raise to station 2612-Q, going through 2612-M, 2612-O, 2612-P to 2612-Q, plus 15 feet, which brings you to the line of the Conkling as described in the patent, 133 feet; cross-cuts north and south from Custer drift 96 feet; drift C marked in green on exhibit 4, marked "plus 14 feet."

This brings me to a point marked December 16, 1911, running thence to station 2981-D plus 54 feet, at a point marked by a little dotted line across the drift "April 24, 1914." That brings me to the west end line of the Conkling, 68 feet. Then there is a cross-cut north from C drift to station 21-C. That is this cross-cut colored green, 34 feet, making a total of 331 feet.

Mr. Dickson: 331 as he has given it just now. The drifting that is thus far described as having been done in 1914, should be 331 feet instead of 334 feet as stated in the account.

140 (Witness continuing:) There is 102 feet 600 level from station 3908 plus 48 feet, station 3910 plus 28 feet, dated July 20, 1914.

Raise from the 600 foot level to McKay drift, a small portion of the top is inside the Conkling—15 feet. It is a three compartment raise. At the top of this there is a broad station cut and is given on account of its width at about double its length, 58 feet.

I have included nothing for the sinking of the Silver Hill shaft from the 500 to the 600 foot level, and I have included nothing for the drifting from the Silver Hill shaft out to the Conkling west end line as patented. But I know of no way that the ore of the 600 level within the Conkling ground could have been gotten out without the Silver Hill shaft or some other shaft or winze down between the five and six. There was no other way.

Now we will go to 1915, 39 feet drifting. Face of this drift marked "October 10, 1915," distance 39 feet. This 39 feet includes the drift out to the slope.

The distance from the Silver Hill shaft up to where you strike the line of the Conkling as described in the Conkling is about 455 feet. No part of that is included in the account for work done. We went 35 feet after we crossed the line before we got ore.

The next piece of work is one compartment raise, 15 feet. That

is the chute from 600 feet level to 600 middle stope. There is one raise here 16 feet. * * * I hold in my hand here the work done in each year including the year 1916.

Mr. Dickson: Simply as a matter of convenience, gentlemen, when we come to the discussion, I offer these in connection with Mr. Brooks' testimony, to have the figures collated there in convenient form for us.

These sheets which are referred to by the witness contain the following data:

141 *Development Work Done for the Conkling and Arthur Claims.*

1902—April, 1916.

1902. Crescent Drift cleaned out, retimbered where necessary, etc., from Sta. 131 to Sta. 166—13.8 ft....2079.5 ft. at \$3.00
Crescent Crosscut run from Sta. 1155 to Sta. 1156—
22 ft..... 90.5 ft. at \$12.00

1903. Within Arthur claim:

Crescent Drift from Sta. 166—13.8 ft. to Sta.
166—78.8 ft..... 65.0 ft.
Crescent Drift from Sta. 1173—11.5 ft. to Sta.
1174—11.0 ft..... 98.0 "

154.0 ft. at \$15.38

Within Conkling claim:

Crescent Drift from Sta. 166—78.8 ft. to Sta.
1176—2.5 ft..... 35.0 ft.
Crescent Drift from Sta. 1174—11.0 ft. to Sta.
577—6.0 ft..... 974.0 ft.
Crosscut South from Sta. 1176..... 29.5 "
Crosscut North from Sta. 1177 a..... 15.5 "
Crosscut North from Sta. 653..... 17.0 "

1071.0 ft. at \$15.38

1904. Within Arthur claim:

Tarbet Drift from Sta. 568—7.0 ft. to Sta.
658—11.0 ft..... 319.0 ft. at \$15.38

Within Conkling claim:

Crescent Drift from Sta. 577—6.0 ft. to Sta.
604—25.0 ft..... 207.0 ft.
Crescent Drift from Sta. 605—10.0 ft. to Sta.
660 200.0 "
Crosscut West from Sta. 601—10. ft..... 38.0 "
Crosscut West from Sta. 605..... 23.0 "

468.0 ft. at \$26.186

	Crescent Drift from Sta. 604-25.0 ft. to Sta. 605-10.0 ft.....	60.0 ft. at \$54.073
	Crosscut South from Sta. 601.....	56.0 ft. at \$15.38
1905.	All within Conkling claim:	
	Crescent Drift from Sta. 660 to Sta. 664.....	185.0 ft.
	Crosscut Southwesterly from Sta. 661.....	65.0 "
		<hr/> 250.0 ft. at \$26.186
	McKay's Crosscut from Sta. 660 to Sta. 660-130.0 ft.....	130.0 ft. at \$12.00
1906.	All within Conkling claim:	
	McKay's Crosscut from Sta. 660-130.0 ft. to Sta. 667-40.5 ft.....	284.0 ft.
	K. K. Drift from Sta. 1856 2.0 ft. to Sta. 1857 2.0 ft.	42.0 "
		<hr/> 326.0 ft. at \$12.00
1907.	All within Conkling claim:	
	East Drift from McKay's Crosscut (prior to June 1, 1907) from Sta. 1855-2.0 ft. to face.	140.0 ft. at \$12.00
	McKay's Crosscut from Sta. 667-40.5 ft. to Sta. 1994-10.0 ft.....	91.0 ft. at \$15.38
	K. K. Drift from Sta. 367 west to face.....	33.0 ft.
	K. K. Drift from Sta. 1878 to Sta. 1879-10.0 ft...	40.0 "
		<hr/> 73.0 ft. at \$12.00
	Drift from K. K. Raise from side of Raise to face	43.5 ft. at \$10.00
142	K. K. Raise, 3 Comp. 59.0 ft. to top.....	59.0 ft. at \$25.00
	Chute opposite Sta. 369 (K. K. Drift).....	15.0 ft. at \$10.00
1908.	All within Conkling claim:	
	Work at mouth of Drill Hole Drift equal to..	14.0 ft. at \$26.186
	McKay's Crosscut from Sta. 1994-10.0 ft. to Sta. 2010-22.0 ft.....	96.0 ft. at \$15.38
	Drift under Elephant Stope from Sta. 2010-2.0 ft. to Sta. 3039-10.0 ft. (less Joint Survey Stope).	110.0 ft.
	Drift west from Sta. 3037 from Sta. 3037-35.0 ft. to face.....	10.0 "
		<hr/> 120.0 ft. at \$12.00
	Switch and Powder Magazine, along McKay's Crosscut near Sta. 1855 equal to.....	61.0 ft. at \$10.00
	Wet Chute at Sta. 3038-10.0 ft. (2 comp.).....	15.0 ft. at \$18.00
1909.	All within Conkling claim:	
	Drift North from Sta. 2247 to face.....	19.0 ft.
	Drift North from 2285-10.0 ft. to face.....	38.0 "
	Drift 21.0 ft. above tunnel level from Sta. 3037-31.0 ft. to Wet Chute.....	21.0 "
	Drift 11.0 ft. above tunnel level from edge of Stope to South side line of Conkling claim.....	12.0 "
		<hr/> 90.0 ft. at \$10.00

NOTE.—These two last drifts shown on Map A in green.

1913. All within Conkling claim:

Toole Drift from Sta. 4462-6.0 ft. to Sta.	
3162 a-10.0 ft.....	52.0 ft.
Engine Drift, all that part east of Columbia Raise	
and from Sta. 2612 c southwesterly to connection	
with old drift.....	110.0 "
	<hr/>
	162.0 ft. at \$12.00

1914. All within Conkling claim:

Custer Drift from Sta. 2616-m-7.0 ft. to Sta.	
2612-q-15.0 ft.....	133.0 ft.
Crosscuts North and South from Custer Drift....	96.0 "
Drift C from Sta. 2581-c-14.5 ft. to Sta. 2581-d-	
54.0 ft.....	68.0 "
Crosscut North from Drift C at Sta. 2581-c-7.0 ft.	
from side of drift to face.....	34.0 "
	<hr/>
	331.0 ft. at \$12.00

NOTE.—By mistake this is given as 334.0 ft. on accounting sheet.

600 Level from Sta. 3908-48.0 ft. to Sta.	
3910-28.0 ft.....	102.0 ft. at \$15.00
Raise from 600 Level to McKay's Drift 3 comp.	
part within Conkling lines.....	15.0 ft. at \$25.00

143

Station on McKay's Drift at top of the above described raise, equal to.....	58.0 ft. at \$10.00
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1915. All within Conkling claim:

700 Level from Sta. 4276-41.0 ft. to face less	
700 Stope	39.0 ft. at \$32.00
Raise from Level to 600 Top Stope at Sta.	
3909½ (3 comp.)	52.0 ft. at \$25.00
Chute from 600 Level to 600 Middle Stope at	
Sta. 3910-7.0 ft. (1 comp.).....	16.0 ft. at \$10.00
Chute from 600 Level to 600 Middle Stope at Sta.	
3910-a (1 comp.).....	15.0 ft. at \$10.00

1916. All within Conkling claim:

Engine Drift from Sta. 2612-s to Sta. 2612-u-	
21.0 ft.....	115.0 ft. at \$12.00

NOTE.—The work done in 1910 and 1911 in Engine Drift, C Drift, B Drift, E Drift and F Drift from the Columbia Raise was not included in the list of development work given on the Accounting Sheet, by Mr. Dickson's orders, since no stoping was done in said years.

(The foregoing data in connection with the maps will show all the development work done, for which the defendant claimed an allowance or deduction.)

On exhibit 2 there is indicated where certain vertical sections have been taken through the ground. Section 0 to 15, exhibits 5 to 20. These sections are taken 10 feet apart. The lines of sections are shown on the map, exhibit 2. The view of the sections is looking east. The colored portions are actually sections with no projections.

Exhibit 5, Section 0, the upper portion represents the McKay drift. (These sections are all in evidence and part of the record and are so self-explanatory that the witness's testimony regarding them will be given but briefly.)

These sections are on a scale of 10 feet to the inch.

There appears to be some ore taken from a part of the Elephant stope which lies within the Conklings ground. If we take the monument as marking the westerly boundary. It was winter and I could not get out on the surface to make any surface surveys on account of the snow. I went in there and measured off and told them it was two sets from that line, 10 feet from the line of the raise. I thought at that time I was putting it 5 feet to the west of our line. I wanted to get them inside of our line.

I afterwards found that a mistake had been made, and they got back 5 feet farther than I intended, and 5 feet nearer to the K-K raise. I was in there afterwards and found the timber that

144 I had marked, and the man told me that I had said two sets. Afterwards they timbered up along that line and later there was a crushing down and breaking of that end of the stope. They cleaned it out again which widened it still further. I don't think they really did any stoping. They cleaned it out; what had fallen down.

Cross-examination of Mr. Brooks.

By Mr. Critchlow:

(Witness, continuing:) I worked for the K-K from about the time of its organization in 1902. The company commenced the work at the end of the South cross-cut shown on the map. Westerly beyond that point it was caved in places. Timbers were down and some ground had run in.

I had done the engineering work for Mr. Treweek who did the previous work in the tunnel.

Mr. Dailey gave directions as to the course of the tunnel. He was superintendent in charge of the K-K. He followed what he thought was good prospective work. There was a winze started down from the Hanauer tunnel on a certain dip and we calculated about where that incline would strike down to the level and we aimed for that point. The map shows or indicates that by June 11, 1906, the work southeasterly and southwesterly of station 660 had extended to a point northwesterly of 664 where the date June 11, 1906 is given; and in a southeasterly direction it extended about 200 feet along the McKay cross-cut and from the dates given on the map it is safe to infer, I think, that I had made no surveys in there between February 20, 1906, and June 11, 1906. I might have been in other parts of the mine. At that time I made the surveys in the K-K, I

did so as Mr. Dailey called upon me for them. That is true of all the time I worked for the K-K since the formation of the Coalition Company, I go up and survey wherever I think it is necessary. I may go up twice in a month and I may not go up for two months. I have had no fixed habit in that respect because the work progresses differently in different places. Sometimes I am needed oftener than at other times. I have had some latitude with respect to time of making surveys. I went up when I thought it was necessary and generally I would discuss the matter with the superintendent who would advise me that he would let me know when he got ready for me; so that it happened that in many places in the mine a considerable time would elapse and a considerable amount of work would be done between surveys. That would be true of development work and stopes as well. I have a list of my surveys and I will give them to you.

145 The first one after Station 660 is February 20, 1905, showing the face of the main tunnel at a point 65 feet from station 661 and the other point about 30 feet from station 660.

The next one was September 5, 1906, Elephant stope, McKay cross-cut.

November 23, 1906, Elephant stope, and McKay's cross-cut.

June 2, 1907, Elephant stope, K-K drift from McKay cross-cut.

August 3, 1907, Elephant stope, K-K drift from McKay's cross-cut.

December 4, 1907, Elephant stope, K-K raise and stopes.

June 29, 1908, Elephant stope, McKay's cross-cut, and final survey of the K-K raise.

April 13, 1908, Elephant stope, McKay's cross-cut;

August 24, 1908, Elephant stope, McKay's cross-cut and drift.

September 29, 1908, Elephant stope in joint survey with Frank Anderson.

October 27, 1908, Elephant stope, McKay's cross-cut.

January 8, 1909, Elephant stope, McKay's cross-cut.

March 19, 1909, Elephant stope, McKay's cross-cut and drift.

April 30, 1909, Elephant stope, McKay's cross-cut.

June 22, 1909, Elephant stope, McKay's cross-cut.

August 2, 1909, Elephant stope.

September 22, 1909, Elephant stope, McKay's drift.

March 8, 1910, Elephant stope, McKay's drift.

March 10, 1910, Elephant stope, McKay's drift; and lines for Columbia raise.

April 30, 1910, Elephant stope.

June 13, 1910, Elephant stope.

May 4, 1912, Elephant stope and McKay's cross-cut.

May 12, 1914, Elephant stope.

146 October 14, 1914, Elephant stope, Receiver's stope, first survey.

April 13, 1916, Elephant stope, joint Survey of Silver Hill shaft workings. This was made in connection with Mr. Anderson. We were in the Elephant stope and all over.

April 15, 1916, Elephant stope and joint survey of Receiver's stope with Mr. Anderson. That is the last I have been in there

since that time; that is, the last time I have been actually making surveys.

I have stated that I was familiar with and did survey in the Alliance tunnel for Mr. Treweek,—that is, for the Alliance Mining Company. Just before the Kearns-Keith Company acquired the tunnel the work was being done by the Alliance Mining Company; prior to that by the Hanauer Company.

I speak of the character of the ground through which the tunnel was driven both from recent observations and from recollection of the survey visits and other visits. Very heavy ground began at about station 577 plus 61, about 600 feet from the westerly end line of the Conkling. The ground was very wet. It would wash in a lot of fine stuff right in between the lagging; had to be lagged very tightly. When I speak of spiling I mean the kind of work that is done in driving a tunnel through wash where you have to drive spiling ahead. There was spiling driven more or less all the way from that station into about the mouth of the McKay cross-cut; the latter part of that was all spiled continuously. It was heavy ground but it did not cave in large pieces. It washed in from the water; kept washing in and disintegrating. It crushed the timber in places. The tunnel was driven in limestone—the foot-wall of the Crescent fissure. The points marked "bulkhead" from this drift, running from station 653 to 655 and from station 567, that indicates where they drove off and were driven back by the heavy flow of water. This ground had to be heavily timbered. The whole tunnel back to pretty near the point where it commences was all heavily timbered. Maybe two or three places that are not heavily timbered but most of it is. The objective (of the tunnel) was some point at which it was surmised the cross-cut fissure on its dip might reach the tunnel level.

I knew or understood that the Kearns-Keith Company had a quarter interest in the Conkling and Arthur claims. So far as I know they did not have any interest in the Silver Hill and Custer No. 2. until after ore was discovered. The K-K Company, so far as I

147 know, had no interest in the Red Fox or U. J. Werner at any time. Prior to the time when ore was discovered in that country down there the only holding which the K. K.

Company had was a quarter interest in the Conkling and Arthur claims. With reference to the West end line of the Conkling, which I sought to establish under ground, after ore had been struck, I made a calculation as best I could in the winter time, not being able to go upon the ground, and gave some instructions as to where that line would be found upon certain sets in the K-K drift. That was before any ore had been stoped. I cannot give the date except that I think it was in the winter of 1906-7. As engineer of the company my opinion was that the westerly end line of the Conkling should be drawn practically through the present red line on the map, cutting off the 135 foot strip. My idea in establishing the line was that they should work westerly of that line and not easterly. My recollection is that at that time they had made arrangements for acquiring the ground to the west. I understood the K-K Company had become or was about to become owners of the Custer and Silver Hill.

I want to say that I am not clear about the date when I gave instructions as to the position of that line.

The notation which I gave you yesterday as to a survey made upon September 6, 1906, of Elephant stope and McKay cross-cut is probably not a transcript from my notes because the Elephant stope was not known at that time as the Elephant stope. I have in this memorandum at the head of that paragraph "Elephant stope and working in connection therewith", and in marking the date of my survey I meant the workings leading to the Elephant stope and those connected therewith. If my reading of my memorandum gave you to understand that I surveyed in the Elephant stope on September 5, it is a mistake so far as being actually in the Elephant stope; it was merely at the mouth of the drift that leads right into the Elephant stope now. They were not working in the Elephant stope on November 23, 1906. The face is shown on the map Exhibit 1, marked "November 23, 1906." You may find the surveys that I made in September and November, 1906, recorded in Vol. 92-D, pp. 75 and 115. There was work in the Elephant stope at the time of the survey of June 2, 1907. Exhibit 2 shows the face at which work was being done in the Elephant stope on June 2, 1907.

Map, Exhibit 2, graphically shows there was a face in the stope June 2, 1907. There was a drift in the Elephant stope then; it was a drift and a body of ore. It was the K-K drift.

148 Q. So that this memorandum also would not be quite accurate to that extent as it was not on June 2, 1907, a survey of the Elephant stope.

A. It was a survey of all the opening that was in it at the time and it was in ore; it was the first opening in the Elephant stope, the map exhibit 2, graphically shows the extent of the stope August 1907, by a broken and dotted line. The part of the Elephant stope which is included in this broken line, on Exhibit 2, marked "August 3, 1907" is not now accessible.

I was in the K-K drift the other day and I couldn't go more than a short distance beyond the foot of the K-K raise, somewhere about the red line. I have been frequently in this stoped area that we have just been talking about, after I made my survey of August 3, 1907. I am speaking of this area within this dotted line upon Exhibit 2. I think I was in there two or three years after 1907.

It is a fair statement to say that the survey which I made August 3, 1907, was not a survey for the volume or quantity so much as it was a survey for directions. I was in there to locate, in a general way, the directions of the stope and to show outlines in a general way. They were working in the stope and it was being enlarged from day to day. I had no intention at the time of making that survey of marking definitely the exact quantity of ore going out of there.

Exhibit 2 shows graphically the extent of the working in the Elephant stope December 4, 1907. It is marked by the line indicated by a dash and two dots, curved and bearing a mark along it

"December 4, 1907." My notes make no mention of size except in two directions.

Referring to the sections, I would say that section 4 does not include any work in December; it would be section 5 which would include December. Only a small part would be shown on section 5. The volume shown would increase as the sections go easterly. Section 8 would show practically the whole of it.

Q. As I go along these sections through 5, through 6, and through 7 and 8, I observe that they are practically uniform in height from floor to floor. You did not obtain that height—your notes not showing any measurements in a vertical direction?

A. The sections show the broken line, which indicates it was not absolute measurement. Measurements were obtained from my own recollection and from Mr. Hurley's and Mr. Dailey's statements in regard to the stopes. These sections were obtained from using the height in the westerly end of the stope and the known height at this point, approximately known, and then drawing the line and interpolating it.

Q. It would be a height known at what section? * * *

It would be in the neighborhood of section 2, where it passes through the Elephant stope?

A. Yes.

Q. And the other point would be in the neighborhood of fifteen?

A. Yes, sir.

Q. So that the distance between stations 2 and 15 would be 130 feet?

A. Yes, sir; the run is interpolated in most places. Where it is not interpolated it is shown by the solid line instead of a dotted line. I cannot state to you how long it has been since this area between the line of August 3, 1907, and the line of December 4, 1907, has been inaccessible.

According to the record given yesterday, my next visit into the Elephant stope was January 29, 1908. Some of the stope outlines are a solid line with little dots on the inside of the stopes. That indicates actual as distinguished from conjectural data; indicates that it is put in from measurements of widths from survey stations except, of course, where two stopes come together. That is indicated simply by a dotted line, to indicate that the two stopes run into each other. At this side of the Elephant stope, for example, there is a short distance that is broken but it is marked "K" because we could not get exactly to the limits; we had to estimate the limits as near as we could. Calling particular attention to the portion which I have just referred to of the Elephant stope between sections 6 and 7, which is marked "caved", and along which there is the words "September 29, 1908" that is the date upon which Mr. Anderson and I made, or attempted to make a survey. I had been in there April 14, 1908. There was work done between April and September. Between those dates it had caved so that we couldn't get to the exact edge. My lines there show the limits to which I surveyed on April

14, 1908. As to that part which is marked "caved" I had not made any survey of measurement until I attempted to make a survey with Mr. Anderson. I did not survey the whole of the little drift running off from the McKay drift at Section 9, on Exhibit 2, and which runs on over to section 6 a distance of thirty feet, as shown on Exhibit 2. My first survey of it was taken in at a distance of eighteen and a half feet. Afterwards it had been extended, and on September

19, 1908, Mr. Frank Anderson measured the same drift to 150 its face, and it is so marked on the map "F-A", September 19, 1908." Certain lines made upon the map Exhibit 2, are from Mr. Frank Anderson's notes. Here is another marked "November 19, 1909, lines to hold stope, and is marked "F-A." I never did go in there. I know nothing of that measurement or survey. It would not be on the map or be known to me except for Mr. Anderson's survey. The part here referred to, however, is outside of the Conklings ground. There is another line marked Frank Anderson shown on the outside of the Elephant stope on the extreme westerly end of it. It is also outside of the Conklings ground. Here is a line marked "November 19, 1909, F. A."; it is between sections 5 and 6, and within the Bench stope. There was also the line "November 19, F. A." on that other floor. Had it not been for the measurements thus made by Mr. Anderson November 19, 1909, and incorporated in this map, the Bench stope would have been a different shape and probably similar in sections. Mr. Anderson furnished data for this map. These maps are made from our surveys, made by both of us, in that stope.

The height of the Chute stope as shown upon sections 23 and 24 I think is from data secured by Mr. Anderson and myself. Mr. Anderson's data does not always show the same height as mine. Our heights generally, are not at the same point. On Exhibit 2, Station 483—I don't know what Mr. Anderson shows as to height there. Perhaps his survey was later than mine and some work was done after my survey.

As to the time of making surveys, I don't think that there was any policy upon the part of the management calling for surveys to be made at the conclusion of stoping in any particular place, although I know a number of times I was called in to make surveys and Mr. Dailey asked me to hurry up and come up before any caving had taken place. That happened in the Elephant stope in two or three places. I have forgotten the details but remember he did speak once or twice of having me go into the stope while I could get in. I took heights and measurements of the stopes. The management simply told me to go in and measure up the stope and I did so. In a great many instances I got heights. In some places I did not. Yesterday I gave the volume as I have computed them for various stopes. These names given the stopes are arbitrary names; some were named by me in making the map, some had been named by the miners. I am the author of the name "Elephant" stope. The Chippie drift stope was named by the miners. There was a Chippie machine in there. The Incline stope was named by the miners working in it on account of the incline running in there.

The Chute stope was named by us when we made the map in order to distinguish it from the Chippie drift stope. It had no separate name in the mine.

The Joint Survey stope was named after Mr. Anderson and I surveyed it. So the Bench stope and the Hat stope were named by the map maker.

No attempt to give an accurate measure of volume of these different stopes was made until after the maps were made. You ought to understand that these computations which I gave are the result of our measurement and estimates and our information.

Redirect examination of Mr. Brooks:

The workings had first disclosed ore five feet South beyond Station 667 at a point marked with an arrow pointing -outcast dip 70 degrees, on Exhibit 2.

My first survey of Station 1857 was made on June 2, 1907. It had gone to this point marked June 2. My last survey before June 2, 1907, was November 23, so that sometime between November 23, and June 2, the K-K drift had reached the stope at station 1857.

I will give you the volume in cubic feet of all material, ore waste and everything extracted within the Conkling claim, if the calculations on the ground were to control the west end line of that claim. I have a list made out headed "stopings within the lines of the Conkling according to posts on ground."

1907 the Elephant stope 11,464 cubic feet.

1913 the Tool stope, approximately 1000 cubic feet.

1914 Receivers Stope 2319 cubic feet.

1916, 704 Raise stope 350 cubic feet.

Total 15,033 cubic feet.

I spoke yesterday of having in my notes a reference to the survey that I made of the 600 in 1914, that was not on the map. I have ascertained where that was since I was on the stand yesterday; It was on the 600, but it is entirely out of any of the Conkling ground, even as described in the patent.

152 On direct examination yesterday I gave as the volume of material extracted in 1907, 50,000 cubic feet. That took me up to the survey of December 4, 1907.

In making that estimate of 50,000 cubic feet we divided the Elephant stope up into four different areas—that portion that was mined prior to December 4, 1907, that took an area called "A" at the east end of the stope. The area was 336,339 feet, with an average height of 13½ feet. That would be the area and the width would be clear across the stope; then the deep way was from that point back south-westerly to section 5. The average height was twelve feet with an area of 1923 square feet. There may be a point wrong on that first number. I think the figures are in writing. The "C" area was a section right through the heart of the stope down to section 5. The average height was 10 feet from one end to the other; It was higher, I think, at the east end.

Starting from Number 3-H at the Southeasterly corner of the Ele-

phant stoep shown in blue on Exhibit 2, and going thence westerly—running from that point southwesterly to a point where it crosses section line 8, you have a southerly side or edge of that stoep from actual survey. From thence on still southwesterly a little beyond section 6; it would be thirty feet—that is where it is marked “caved” on this map. Where it is marked “caved”, and the broken line, you have the southerly edge of the stoep determined by actual survey right on around until it intersects the westerly end line. I have the northerly edge determined by actual survey all along as shown by the full line to edges of the Chippie drift stoep and also the Chute stoep.

I have the whole of the Chute stoep within the Conklings East of the west end line in black determined by actual survey.

As to the Bench stoep the boundaries of that are determined by actual survey except a small portion which is marked on this map as the westerly end line, the top floor, which is broken for a distance of about thirteen feet inside of the Conklings ground. With that exception the whole of the Bench stoep on Exhibit 2, the edges of it, are determined by actual survey.

The Joint Survey stoep is marked as “full” all the way around indicating that it is determined by actual survey.

153 Referring to the Chute stoep, its boundaries are shown on the map from actual survey except two or three feet on its north boundary marked March 8, 1910.

As to the Chippie drift stoep, there is a short line marked April 30, 1909, which seems to be dotted lines between section- 7 and 8. There is also a northerly boundary between sections 10 and 12, broken line, thirteen feet. With those exceptions the exterior boundaries of the Chippie drift are about all from actual survey.

The boundaries of the Incline stoep have been determined from actual survey. So as to the Hat stoep, that portion of it in the Conklings ground.

Referring to map Exhibit 3, the 600 Top stoep thereon—there is a portion near the raise going up from the 600 foot level, about fifteen feet, marked “cribbled” and “filled”. I could not get the exterior boundaries there. There is also a small distance of four or five feet from the northwest corner of the raise. The map shows dotted lines and full lines and broken lines about this stoep—except for those lines the exterior boundaries have been determined by actual survey.

Taking the 600 Middle stoep, its boundaries have been determined by actual survey, but dots here only indicate that it lies under another stoep.

Now, the Receiver's stoep, between section 3 and section 6, there is a broken line and the sides of the stoep are not connected; the dotted line is not connected.

We showed just what we could see; it was filled along this line marked “filled” as it crosses section 5, the broken line there indicating that it has not been determined by actual surveys about twenty feet long; and the other where it crosses section 6 is about 10 feet

long; then between section 7—between sections 10 and 11 the exterior line of the stope is dotted, connecting the two full lines.

So far I have been following the north line. Now coming to the south side between sections 11 and 12, a little bit beyond section 10, about 22 feet, it is marked "filled."

From section 8 back to the square marked "break into old Drift stope for a distance of 22 feet," at the north end of that we had the actual boundaries ascertained by survey, but not at the south end of that line, as it was caved and broken down there, some, right under that raise, but from that raise, that line marked "filled"

154 runs southwesterly for a distance of 33 feet where it joins the solid line, and I have also a line broken on the outside of that marked "filled;" roof is solid. We could look over that fill and see the roof.

On this exhibit 3, between section 8 on the east where the broken line commences westerly to section 3, I have represented the stope as extending south. It is about from 3 up to 5 feet; runs to nothing at the end. With the exceptions I have stated, the exterior boundaries of the Receiver's stope have been determined by actual survey.

Coming to the Toole stope, there is a small place in that stope indicated by the square sets and dotted just outside the red line. * * * Back to these square sets is marked "caved." We could not go any farther.

Mr. Anderson, I believe, was engineer for the Alliance Company. I saw him making surveys for that Company and I made surveys with him.

I do not know of my own knowledge just when stoping in the Elephant stope commenced. I know that some of the ore was taken out and stored in the beginning, but I do not remember just where. I know that the first shipment of ore that was made from this Alliance side was shortly after the Silver King Coalition Mines Company took over the old Silver King property and the K-K property and others.

I stated that I understood that Mr. Dailey had no right to work east of the line, which I determined underground during the winter referred to, but that was merely my legal conclusion, nothing else. The idea was in establishing that line to determine what ore taken out would be east and what would be west from what I took to be the west end line of the Conkling.

Going now to section 7, at the junction of what is represented in blue as the Elephant stope and the Chippie Drift stope, I have a full solid line. I have that height from actual survey at that point of junction.

Recross-examination of Mr. Brooks:

I think it was along in the winter of 1906, after the first ore was struck in that McKay cross-cut that I went to the Surveyors-General's office with a view of finding out the boundaries of the Conkling claim. I do not know that I have ever seen the patent, but I saw the notes of the survey. That was after the 23rd of November,

155 1906. I made this investigation about the boundaries because Mr. Dailey asked me to determine as nearly as I could the boundaries of the Conkling mining claim. He asked me at the time if the map was correct. I told him I would look at it, and I did. He wanted me to determine the position of the ore with respect to the Conkling mine.

It was a matter of concern to me to determine whether the ground owned by the Keith-Kearns Mining Company was not less in extent than I had previously thought because we knew the ore was in that drift I had been in there and measured it, taken the dip of it, and Mr. Dailey said to me, "That is the Conkling Mining Company." He says, "I wish you would determine as near as you can the boundaries of the Conkling mining claim." He asked me if the map was correct. I looked it over and studied it over and said, I don't know positively. I said I would look at it, which I did. He simply asked me to determine the position of that ore with respect to the Conkling lines. The management of the Kearns-Keith Mining Company and of the Silver King Coalition Company was one and the same person, Thomas Kearns; and the assistant manager of both companies was M. J. Dailey, and I was engineer of both. There were other officers in common. At a former trial in an action entitled The Silver King Consolidated Mining Company against Silver King Coalition Mines Company, I probably testified as follows:

"Q. Why didn't you care to show it in that territory"—that is, certain work done out under other people's ground——

A. "Because we didn't want to show it at all."

Q. "Why not, what was the reason for not showing it?"

A. "They was not showing work at that time under any territory that did not belong to us."

I don't know what territory you have reference to, or what particular place. I believe that was a correct answer as to the McGregor territory. They might not care to show the work being done under other people's ground, they might want to know it themselves though. Probably applied to that particular piece of work; they did not care to have it surveyed in order to find out what was being done in under that territory. I don't think that applied generally; my recollection is just applied to the work under one person's ground.

THOMAS L. WALDEN, a witness for the defendant, testified as follows:

My name is Thomas L. Walden. I am 52 years old.

My business is mining. I have followed it since I was fourteen years old.

156 I am now employed in Yerrington, Nevada, by the New Yerrington Mining Company and Wheeler Gold Mines Company as superintendent.

I worked once for the Kearns-Keith Mining Company. Beginning December 1902, I continued in the employ of the Company

until November 1905. I have never worked for the present defendant. I worked for the old Silver King Company prior to December 1902. From December 1902, to November 1905, I was foreman of the Kearns-Keith Company.

We call the side upon which the ground in question in this suit lies the Alliance side for convenience. I think it was along in January 1903, that we started to work. We commenced there near the Treweek raise to drift there along that fissure. We started two drifts there; there were two showings of ore. Before we started these drifts we cleaned up some along the drifts there, but not very much.

I commenced my work just a little west of Station 1173, and run westerly and drove these two drifts at the same time. There was a little showing of ore at Station 1173 or in that immediate vicinity, and also at Station 166 plus 13. We started driving westerly on both those lines. We drove them on for a hundred and more odd feet, and this came around and joined with this drift here, the ore did, connecting from this station here; that is 1176.

From 1176- around to 1177-A I did that work; also from 1177-A to a little short cross-cut at the face of which it found "February 28, 1903." From station 1177-A westerly to Station 577, I ran all that work, including the little cross-cut running northerly from station 653—I ran that which is within the Conkling ground. And from about 30 feet westerly or northwesterly of Station 567 we have a little crosscut running northerly marked at its face date "August 12, 1903, bulkhead"; I ran that also; also the work from Station 577 to 601; also the work southerly from 601 to the face where we have the words "October 18, 1904." I ran the work also from Station 601 to Station 605. I also ran the little piece of work running out a little distance more to the northwest than the main portion. I did all of the work from Station 605 shown within the Conkling ground as represented on this map to Station 660 where the McKay cross-cut goes out. I think I started in the McKay crosscut, but I don't think I did more than 25 or 30 feet in it. I did the work westerly from Station 660 through Station 661 to the face which is designated by the date February 20, 1905.

157 I will take up the work where I started to drive it in the vicinity of Station 1173, and give my best judgment as to what it cost a foot in different places, to drive it. I made a statement of the cost and how I arrived at it, giving the various items of cost. I will refer to this statement to save time.

A thousand and sixty-three feet of partly timbered ground cost \$15.38 a foot; that is from Station 1173 and from Station 166 plus 13—1,063 feet, then there was a distance of 407 feet, which cost \$26.86 a foot. I have been in the ground recently and I pointed out to Mr. Brooks these various distances.

Sixty feet in there of very heavy ground cost \$54.73 a foot; I believe these are the three costs that we made up there; three different costs according to the character of the ground.

I have 100 feet of drift, cost \$15.38 a foot; that is, the Cut-off drift. Then I have a cross-cut at Station 1176, 291½ feet from Station 1176.

From Station 1177-A, is $12\frac{1}{2}$ feet, a little piece running to the north.

From Station 653, 20 feet, making a total of 62 feet, cost \$15.38 a foot; then I have in 1904, cross-cut drift running to McKay's cross-cut, 457 feet, and to the Drill-hole drift east, 12 sets. 12 sets cost \$54.07 and the 407 feet, \$26.18 a foot. That was very heavy ground. We had to spile it, breast board it, and we had to use straw and sacks.

The next is spiling 407 feet of heavy ground, timbered and spiled.

Then we have a cross-cut station here 56 feet from station 601; cost per foot, \$15.38. From station 181 was very bad ground, cost \$26.18 a foot—38 feet.

Then we have a cross-cut at Station 605, 25 feet, estimated to cost \$26.18 a foot.

I think I may have driven the whole of the Tarbet drift. It cost \$15.38 a foot.

Sometime in doing this work you would lose your face in the tunnel and you could not get back to the old face, and you would have to change the course of the tunnel and run around the bad place. Sometimes you would lose 30 or 40 feet of ground in this way. We made on an average of 3 feet a day, except where the ground was very bad, where we would not make a foot and a half a day.

We employed six miners in the drift, two men at the face each shift. We were working three shifts. We had a timberman on one shift. Both miners and timbermen received \$3.50 a day.

158 We also had a mucker or laborer on each shift, who received \$3.25 a day.

A set of timbers cost at that time, as nearly as I remember, a little over \$5.00, for a set without the lagging or plank or anything.

My own wages were \$5.00 a day and a house, in which I lived.

I said we made four and a half feet in good ground, that is in twenty-four hours. The worst ground we had was that 60 feet, which I have referred to. We made in that a foot and a half in twenty-four hours. Giving the progress of the work and feet I have not considered cases where we would lose a lot of ground, have to run around it. That would be a case where we would have to do the work all over again.

We had shovelers employed too, one on each shift. We had a skinner also; he ran the trains, pulled the dirt out from the drifts and out to the surface. The skinner received \$3.00 a day.

We also had a blacksmith and a helper. The blacksmith received \$3.50 a day and devoted half his time to the work. The blacksmith's helper received \$3.25 a day, and devoted half of his time to the work. We also had a watchman whose duty it was to watch the works, help dump the train that came out and keep a fire in the dry room where we dried the miners' clothes. The watchman received \$2.50 a day.

We had a timber-framer also, who framed timbers in the daytime and helped dump the cars on the dump. We had a repair man whose duty it was to fix the ditch and track and ties—keep the track up and keep it in repair and work on the ditch. There was a lot of

work necessitated in keeping the track up on account of the flow of water. We did not keep the repair man there all the time, but sometimes we had three or four repair men working on the ditch at the same time. Repair men received \$3.25 a day.

We used also about 50 pounds of powder in twenty-four hours. It cost \$5.95. That was about an average. We used about 120 feet of fuse in 24 hours, which cost fifty-five cents.

We used caps, about 24 in twenty-four hours, cost thirteen cents. Also about a quarter of a box of candles a day, \$1.07. Then for oil we spent about twenty-two cents a day. We had also two horses employed all the time, cost \$1.00 a day for grain and hay for the horses.

159 The machines cost, we estimated, \$1.50 a day, including the fittings to keep them up.

Daily expense for air hose was \$1.60; blacksmith coal about sixty cents a day. We had to haul the coal from the railroad depot by wagons and sleighs, a distance of a mile and a quarter, or a mile and a half.

The air pipe, including the fittings, averaged about fifty-eight cents a day. We had two kinds of pipe. The 10-inch pipe we used for ventilation, and the 2-inch pipe for the compressor. The ten inch air pipe was \$2.25 a day, for 24 hours, and the black iron pipe fifty-eight cents a day.

Our rails cost us \$36.00 a ton. The average cost per 24 hours for rails was sixty-four cents. Then there were splites for rails. The cost of these for 24 hours would be twenty-two cents, and there are track spikes. The cost of these per day would be sixty cents; track bolts ten cents; two inch plank for covering the track so the men could travel back and forth, those planks cost ninety-six cents a day.

There was Oregon fir used for ties across the ditch. The cost of that per day was twenty cents. Ties cost twenty-six cents a day.

Power from the Silver King Mine cost us \$4.00 for 24 hours.

I have an item here under the head of miscellaneous, tool steel, picks, shovels, carts, shoeing horses, repairs on harness, etc., estimated cost per day \$2.00, which I think is a fair and reasonable estimate.

Then I have an estimate of timber used in the very bad ground, 94½ board feet, 8 by 8. That is as near as I remember what we put in there. It cost \$28.75 a thousand.

I have recently gone through the Crescent drift with Mr. Brooks. I pointed out to him the 60 feet of very bad ground I spoke of yesterday. There was 470 feet of ground outside of that 60 feet of ground that had to be spiled. I pointed that out to Mr. Brooks correctly. That was about six weeks ago. That 60 feet of ground is here near the Drill-hole drift. It is indicated on the map by an arrow pointing to 60 feet. The other 470 feet is shown on the map, 207 feet here. 207 feet from Station 577 plus 6 to 604 plus 25. The other 200 feet was just beyond the 60 feet westerly. That was all heavy ground that had to be spiled with a good deal of water. We spiled it overhead and on the sides.

Outside of this 60 feet and exclusive of the 470 feet of spiling

160 ground, the balance I estimated to cost \$15.38 a foot. I estimated the cost of the 60 feet at \$61.00, and some cents, and of the 470 feet, \$26.00 and some cents.

I knew the expense of miners, muckers, repair men, watchmen, trammers, skimmers, foremen, blacksmith, blacksmith's helper, cost of timbers, powder, fuse, and the quantity of such material we would use in 24 hours. I was familiar with the entire cost of the various items, the cost of which entered into the doing of the work.

Cross-examination of Mr. Walden:

I was foreman engaged to look after the men, keep their time, and I kept it. I commenced the work at station 666, where I commenced the two drifts. This was a prospect tunnel, and I was supposed to follow the vein there and I followed it by my own judgment.

We were attempting to make the tunnel about four and a half or five feet. There was a track in the bottom and under the track there was water.

I found very bad ground—not the worst ground—the very bad ground beginning at station 577. That 56 foot drift at station 601 was a prospect drift, and the one on the east side beginning at station 601 plus 10 was a lost heading. We lost out in driving that and had to come back and change our course a little. There was a heavy volume of water there. The size of the 56 foot cross-cut going out from station 601 was about seven feet high, and five or six feet wide. It was in fair ground.

In doing this work we were trying to follow the course of the vein. I cannot tell you how extensive the timbering was, but I should judge that one-third of the work was timbered at any rate. I cannot say with certainty how much of the 1,063 feet was timbered. I know we used some timber in that 1,063 feet, and it is a part of the charge of \$15.38 a foot.

C. P. BROOKS recalled for the defendant, testified as follows:

The Alliance tunnel from its mouth to the west end line of the Conkling as described in the patent is in round numbers a little over ten thousand feet.

I am familiar with all the work done on or beneath the surface of the Conkling claim, and I know of no work on that claim on or beneath the surface except as is shown on the maps which have

161 been introduced in evidence, except there are a few little holes dug in the surface soils; do not know of any extensive work done on the surface. If there were some I would know of it.

There are some prospect holes; might be some little drifts in twenty or thirty feet. I never surveyed them. I have seen little depressions in the ground which led me to believe the work had been done in some prospect holes; how much they were I could not tell, and the size of which you could estimate by the size of the dumps. I never saw anything on the surface that exceeded fifty feet in depth. It was all apparently very old work, probably patent work for the claims.

In respect to the heights in the Elephant stope, the first record I have of it is on January 29, 1908. It is marked on the map 9 feet high, 3 feet under track. That is right at the north side west of the K-K raise.

The next one is at a point marked by the arrow from the end of which reads "13 feet high, 5 feet under the track." That is at about the center of the north easterly end of the stope. The stope was extended five feet below the track and from the bottom to the top was 13 feet. That was January 29, 1908.

At a point at station 366 to the right of that is marked 12 feet high, then there is a mark "filled, January 29, 1908," and at the south east end of that line where it intersects the south side line of the Elephant stope is marked 10 feet high.

On September 29, 1908, I made a survey through a portion of this stope with Frank Anderson. We were at station 3041; the original station 3041 is at the word "chute" marked so on this map, exhibit 2, as 3041. At that point the height of the stope was 7.4 feet; we ran to 3041 A, so marked on Exhibit 2. That is right almost on the west end line, within a foot. At that point the height of the stope is marked 7 feet. From there we ran southwesterly down to a place marked "September 29, 1908," at a distance of plus 21 feet. Along this line the height of the stope is marked, it would be in the neighborhood of 2082, as shown on this map, 6.2 feet. It is 17 feet west of the west end line. At the face the height of the stope is marked "8.5 feet." These elevations or heights of the stopes are taken where we could see any change made in the average; they are intended to be average heights, along those sections.

Mr. Anderson and I both took them carefully and agreed upon those average heights, because it is impossible to read in an irregular stope, you have got to average the floors and the roof. You cannot measure them to feet because you would have a million measurements. We only take the average as near as we can measure by our eye in order to estimate the volume.

Starting again at 3041, we go north to 3041-B, at that point we have the height of the stope marked 6.2 feet. That is $11\frac{1}{2}$ feet inside the Conkling. From that point we have a drift stope drift running out to a point indicated by this broken and dotted line. The stope drift in its north side is marked "September 29, 1908," and the note "average width 6 feet, average height $6\frac{1}{2}$ feet," for a length of $65\frac{1}{2}$ feet. That drift crosses the westerly end line of the Conkling.

Our next point is from 3041-B to 3041-C, so marked on Exhibit 2, a distance of 11.85 feet. The height of the stope at 3041-C is 4.2 feet. That is inside the Conkling. Then from that point we have a line represented in green on this map—and I will say right here that the green lines represent surveys made in common by Mr. Anderson and myself—joint survey lines. That line is running from 3041-C out to a point marked by an elevation mark of 911.0, inside the Conkling. We have the height at the end of that marked 6 feet.

I have a point plus $12\frac{1}{2}$ feet on that line, the height of the

stope marked 6 feet; that is, $12\frac{1}{2}$ feet from 3041-C, along that green line, height equal to 6 feet.

From 3041-C we have another green line running in a northeasterly direction. It is running from 3041; all these are running from 3041-C and running to a point marked by an elevation 907.8; the height of the stope at that point is 3 feet. Then from 3041-C we have another line represented in green running north easterly. It runs from 3041-C and ends on the edge of the stope at an elevation marked 910.6 feet. The height of the stope as marked in the notes at that point was 2 feet, that is between the end of that green line and the one previously given, and then in the edge of the stope. I have about the middle of that point the mark "H" equal to five-tenths of a foot.

At a point on the edge of the stope and about opposite to the figure "8" in 1908, south of this other, I have the mark "Height of stope 2 feet."

From 3041-C we run to 3041-D. We start from 3041-C. It is a distance of 40 feet practically. I have a height marked at 163 3041-D, the height of the stope is equal to 6.7 feet. The height of the stope at 3041-C is 4.2 feet. The height of the stope at 3041-D is 6.7 feet.

It would be a line drawn from these two heights that would give you the average roof and floor. There is one intermediate one, 7.1 feet at 19 feet from 3041-C.

Now beginning again at 3041-D and running southwesterly following a green line to the edge of the stope, which is practically on the west end line of the Conkling, the height of the stope at that point was 8 feet; that is a little east of station 478.

From station 3041-D we go to station 3041-E, which is marked at the Wet Chute so marked by figures 3041-E. From 3041-E we run southwesterly to 3041-F, which is just under the letter "H" of Hat stope, and is so marked with an arrow pointing to the station 3041-F.

At a point plus 39 feet, there is a course taken to the southeast of $16\frac{1}{2}$ feet, at the end of which it hits the edge of the stope and is marked "Height of stope 7.3 feet—midway between sections 1 and 2.

From Station 3041-F running in a southwesterly direction to the face and indicated by a broken green line running to the face of the stope marked "September 29, 1908," the elevation or height of the stope is $7\frac{1}{2}$ feet. That is 14 feet west of the west end line of the Conkling.

At a point between the words "August 24, and September 29, 1908," underneath the Hat stope, the height of the stope is $3\frac{1}{2}$ feet.

Then I have a drift stope running from Station 3037 to face. 3037 is between sections 7 and 8 in the Joint Survey stope. At that point I have a note "stoped overhead," and from that point is a course south two degrees and thirty minutes east, which takes you to the south edge of the Joint Survey stope, marked "Edge of stope, overhead, six feet high."

From Station 3037 running north, 87 west, 12 feet to the edge of the stope, we have a width marked across there 10 feet, and under that is 7 feet high, which means an average height across that point of 7 feet.

Then I have a number of sections made on the drift running from Station 3037 southwesterly to its face, 45 feet. At plus 14 there is a section. That would be the section line 6. There is a section in my book which shows the bottom of the stope to be

164 4.6 feet on the left hand side of the line as you go to the southwest, 2.4 feet on the right hand side of the line as you go to the west; on the left hand side of the stope the vertical height was eight feet; on the right hand side of the stope the vertical height was 5.8 feet; the center of the stope over the line of sight was 7 feet, and across the top of the left hand side of the center line it was 7 feet, and on the right hand side it was 4.8 feet.

There is a note made at that point "Average width of ore appears to be about two feet." At plus 31 end of showing of ore; at plus 31 I have another section end of showing of ore.

I have a cross-section on the bottom. It is 2 feet to the left of the line, 3 feet to the right of the line. The sides go up inclined probably, the first angle being vertically $3\frac{1}{2}$ feet above the floor on the stope, thence goes up vertically 4 feet to the left hand top; on the right hand side it goes up on an incline for four feet.

The distance across to the top of those two inclined portions on the left hand side is five feet; on the right hand side four and a half feet; on the right hand side from that line would be seven and a half feet to the upper edge.

The next one is the face of that drift, six by six. We took a section at the face, stoping along drift from Station 3037. It would be in this joint survey stope—Station 370, which is Mr. Anderson's station, and then to Station 369—Anderson's station; that is in the Elephant stope right east of the chute.

At 3037 we have marked to the left 15 feet; it was 6 feet high right underneath it. On the right hand side we have the words "Stoped up 8 feet out; there is no height given at that point."

At plus 15 from Station 3037 towards Station 370, by Anderson, we have an elevation of 7 feet high. On that same line going towards Station 370, at plus 22 feet, we have 7 feet high.

At Station 370 we have the words "Average 7 feet high, from 370 to the left, a distance of $10\frac{1}{2}$ feet westerly."

The edge of the stope on the right hand side is only 1 foot away. From there it is 40.6 feet to Station 369. At a point 17 feet back to the southwest from Station 369, a bench is marked out to the right indicated by the line marked "September 30, 1908." 17 feet back would be in a stope. About 8 feet from there to the edge of

the stope, and then at a distance of 21 or 24 feet back, the
165 stope goes $9\frac{1}{2}$ and 9.2, making altogether 18 feet and seven-tenths back to the edge of the stope with 9.2 feet, with 10 feet at the lower side and indicated on this map by a broken line, and inside that broken line it is marked 4 feet high, being an average height. To the west of that broken line and north of Sta-

tion 370 we have the marks 5 feet high, which would indicate that was taken as the average height at that portion of the stope. From there on we have a note "Drift in line 7 by 7."

The next survey I made in there was October 27, 1908. I have overlooked one, Station 3041-E plus $7\frac{1}{2}$ feet, height of station 5 feet. The next survey I took was January 8, 1909. I can find no height at that point. The next one is March 19, 1909.

Beginning at Station 2215, which is a point at the raise about 64 feet southwest from the west end line of the Conkling as patented.

Beginning really at 2123, which is near the raise at the extreme westerly end of the stope and in a drift running from there to 2213, through the drift at a distance of $16\frac{1}{4}$ feet southeasterly from Station 2123 along that line there is a course taken to Station 2212, which would be at the top of a raise, 2123, from there we run from 2214 to 2215, which is the bottom of the raise. At 2215 the height of the stope is 6 feet.

At a point marked by a small "a" the height of the stope is 5 feet.

These points I am now giving are located about 65 feet southwesterly from the westerly end line of the Conkling. From *a* we go up on a dotted line to *b*, height of the stope 7 feet. From there we go to *c* northeasterly, height of the stope 7 feet. From there we go to *d*, the height of the stope 7 feet.

From *b* to *c*, well they are both given as 7 feet; that would be the average.

At plus $9\frac{1}{4}$ feet from *d*, I have it marked "stope 7 feet high;" at *e* no height marked.

At Station 2212, 6 feet high; at *F* 5 feet high; at *g* 5 feet high. If so marked on exhibit 2, I have no height of stope at that point; but I have marked from *g* to *h*, running along the line off to the right of it, height of stope 6 feet, shown by the words "6 feet high," about half way between the two.

From *h*, the line runs from the face of the old drift or connects with the old drift. From station *b*, or from the top of the 166 Wet chute I have the measurements of the Hat stope 60 feet long by 15 feet wide. I have the memorandum made on my note "The old stope is 8 feet high," then above that is a floor given as 60 feet long by 15 feet wide and 10 feet high above the old stope; that would be 10 feet above the 8 feet.

That survey was made March 19, 1909. Then there is a portion of that stope for 40 feet in which I have "stope 14 feet high," above the word "stope"; that would make a total of the two stopes 22 feet. That is what is known as the Hat stope.

Taking the Chute stope from the top of the raise, or marked "Chute" here, 18 feet above the drift that goes underneath it was a square set, stope 25 feet long by 20 feet wide, the two southerly or southwesterly sets, so marked on this map and indicated by a dotted line, two sets high.

From a point 8 feet over Station 2216, I have indicated the level underneath running to station 2217, and on the edge of that stope I have it marked 7 feet high, edge of stope, over level. That would

be along this broken line which runs from the chute at 2216, northeasterly; this would be the line of the stope; it is covered really by this heavy black line, on the west line of the Conklings.

Running out from station 2216, there is a broken red line going Northwesterly for a distance of $12\frac{1}{2}$ feet altogether, making 30 feet, goes practically in a straight line for 30 feet, and the point is indicated by the dotted lines that are the junction of them, which is west of the word "junction," at a distance of 28 feet from the westerly end line of the Conklings claim, surveyed for patent.

At that point the height of the stope is 7 feet. Back at a point $12\frac{1}{2}$ feet and right about under the "o" in the elevation height of 802, the elevation was $7\frac{1}{2}$ feet.

There is another point here marked "stope filled 6 feet high, June 23, 1909." It is in the Chippie drift stope.

Running from 2284 in the Chippie drift stope to 2284-A, from there I have a portion of that stope measured at that time, running to the northeast for 20 feet, marked June 23, 1909, and for that 20 feet I have it marked "stoped 6 feet high."

Running from 2284-A to Station 2284-B, I have the stope marked in my book "Stoped 7 feet down, same width." On the other side "Stoped 7 feet high," which would mean practically two floors.

167 From 3037-B in the Bench stope, I have the memorandum June 23, so marked on the map, the edges of it stoped 5 feet down and 13 feet over this floor. I have marked what is the sill floor of the Chippie drift stope, stoped 7 feet high. I had a survey made in the Bench stope September 21, 1909. That is the last one I think I have in there; first floor up at 2308, plus 14 feet, towards 2309, that is northeasterly direction, and is marked by a little circle on the red line between the letters "i" and "f" in drift. At that point the stope was 10 feet high.

Off to the right, between the two stations, it was 10 feet high. Going back from that station to the southwest to the face 21 feet about half way between, about 10 feet from that station it was 15 feet high; at the face it was 11 feet high; in the center 12 feet high; along the southeast corner 12 feet high.

Running from 2308 plus 14 to the northeast towards Station 2309, at plus 19 feet, the stope was 10 feet high. At 5 feet back from Station 2309, it was 10 feet high. At the face marked here by a dotted line, 6 feet high, station 2309, it was 10 feet high.

Commencing at station 3037-C, Bench stope, running southwest-erly at 3037-C, I have two—one at the line or right at the station—14 feet high, one 11 feet out to the right, that would be to the north-west, 9 feet high.

Running from station 3037 to the southwest along this dotted line terminating at the figure 2, August 2, 1909, that same line being marked also September 21, 1909.

Going towards that face at plus 10 feet and 17 feet to the right of the line, would be 10 feet high. At half way between 15 and 20 feet, about 17 feet, it would be 10 feet high.

At the face it was 14 feet high, where the line intersected the face, and 10 feet high at 23 feet to the right.

Station 2081 is in the drift between sections 5 and 6, near the Wet chute—from 2081 to 2081-1.2, there is stoping done along that drift, making the drift wider than the ordinary size, and I have a note, stoping 2 feet high. My recollection of that is it was below the floor of the drift, some stoping had been done.

Then I started from station 2081½ continuing that same work north 39, 42 west to station 2216 in that same drift, and there the stoping continues for a distance of 31 feet, towards station 2216, and is stoped 2 feet high.

168 From station 2216 towards station 2217, the extra stope is shown right there, stoped down below there. It is indicated on that section 2. At section 2217, I have the mark "Stoped 8 feet high."

At station 2217, stoped 16 feet over station.

At station 2218, these last two points were about 5 or 6 feet outside of the Conkling line—station 2218 is inside of the Conkling line. The memorandum is "Stoped 14 feet over station;" at 2218, plus 5, 7 feet high. Then I have the note that is written here. "All the way from 2218 to 2346," which is marked the mouth of that little drift, stoped along drift on right fill, as near as I could make it on the right hand side, 14 feet high; that is in the Chute stope.

Beginning at station 2346 going to 2347, at the top of the incline at 2347—2346, I have 4 feet high. Running down the incline to 2348, I have the height 5 feet, stoped five feet high—then to 2349, height of stope 6 feet high; 2350, 6 feet high; 2351, 7 feet high. If it is marked 8 feet on the map it is a mistake. It is 7 feet high at station 2371.

At station 2352, it is 8 feet high. At 2354 it is 6 feet high. At 2355 from there on to the face I have it marked 6 feet high.

2081½ running from that station for a distance of 30 feet, that was 5 feet high at the end of the 30½ feet. From there running south 38 east, 20 feet along that line it is 6 feet high, indicated by two lines which show the width of the drift; the drift is really higher than the stope.

On the left hand side it is marked "Stoped 4 feet high;" thence north 57 east for a distance of 32 feet, 8 feet high, and at a distance of about 3 feet, little bit wider than half of the drift running along parallel to that line is a bench in the roof which segregates the stope; that is 8 feet high.

2348 to 2348-A, this survey was made June 13, 1910. At 2348-A I have it marked 5 feet high; 10 feet beyond it is marked 5 feet high; 7 feet beyond that 5 feet high; at plus 17 feet 6 feet high.

In the Incline stope I think the date is marked on the map. Then I have a memorandum at station 2348-D, "Stoped up to old stope above running from the level"—I mean the Chippie drift; there is where that it connected in. I had the height on the upper one; I could not very well measure the height at that point. It was not safe at that particular time; there was waste piled in there and some

timbers had given way; I don't know that the roof was caving particularly; they had dumped waste in there and it was too hard to get over it—it was dangerous, but I knew the work, I had been through it before.

2348-d, I run out to the southeast for 7.8 feet to what I marked as the wall of the stope from 2348-c, the wall made a step down or up, and I measured out to that wall. I also connected that station 2353 from that point, that is, from 2348-d; from 2348-d I ran south-westerly from 2348-c, and from that point I measured out to the foot of the bench and to the edge of the stope and marked to the roof 11 feet above my point that I was standing on. That gave the height of the stope there at that point as 11 feet, at station 2348-e.

June 13, 1910, there was a small piece of work done or stoping marked from station 2081½, shown by this station marked 2081½, between sections 0 and 1.

The point nearest the easterly end of the Elephant stope where I have the height determined by actual measurements, is at station 366, and represented by a line across there marked "filled"; that is the point nearest.

I have the height also at the extreme easterly end, marked 12 feet high. As I travel westerly from this line I have just spoken of, I have no height of stopes I think, until I get in the neighborhood of section 5, a distance of about 108 feet. The height in the vicinity of section 5 is about 7 feet. The average height for the 108 feet is made up from measurements of Mr. Anderson and myself. We took 12 feet as the average height, that is for a portion marked "b," and that portion is represented on this map by the space above that line of dots rather far apart.

Section a is the section that is included at that end of the stope and is marked by that line marked "filled." Its average height was 13½ feet.

B is from that line back to section 5, and lying between the northerly edge as indicated on this map and the line of dots running from the end of the word "filled" through the word "stope" down to a point just below a station on the chute there, elevation marked 901.2, and continued westerly to section 5; that is the south boundary of b, and the northerly edge of the stope is the north boundary of b. The average height was 12 feet. That was taken from some measurements of Mr. Anderson and mine, through that stope; also from information that was given us by Mr. Hurley and Mr. Dailey who worked the stope out, and partially from my own recollection, a portion of it.

The next section is from a point indicated below that south boundary of section b, and indicated by another row of dots of a similar character about 10 feet southerly from that, and running parallel thereto, and running out to section 5, that is section c. The average height of section c is 10 feet.

The next section I think is section d. Section d is from that line of dots I have already described as being the south boundary of section c, to the southerly edge of the stope, average height 6 feet.

Westerly from section 5 we took the elevations and took the sec-

tions. Westerly of section 5 the Elephant stope, as I observed yesterday, I had quite a number of places, where I had the height of the stope. I am depending upon these notes and Mr. Anderson's notes for that.

For the Bench stope I took the heights as they are represented on these sections here, and which are based on our figures. The highest part in the Bench stope that I have is 20 feet. Bench stope shows on section 2.

In making my calculation as to the total volume of cubic feet excavated, I was assisted by Mr. Frank Anderson and Miss Block, draftsman in my office. I am speaking now of the cubic feet removed from the Elephant stope; Bench stope; Hat stope; Receiver's stope; Joint Survey stope; Chute stope; and Incline stope—all of them.

As to whether there was any places where there were any substantial differences of opinion between myself and Mr. Anderson as to the boundaries, I will say that there were some places we could not determine at all. There are places indicated on these sections that we could not determine. Take on section O, exhibit 5, for example. There seems to be two places there that are indicated as being unmeasured, at the corner, the lower southerly corner of the Bench stope it is marked "cribbed" and indicated by a broken line. We had the boundary in full down to the point where it was filled; we had it also on the floor, but from that point on, we simply rounded the stope off, carrying these lines.

There is a place marked "filled" between the Bench stope and the drift from McKay's cross-cut, which is marked "filled" and is indicated by a line at either end. The roof seems to be put in in full. The floor is dotted. On the southerly end of that fill I have both floor and roof in full.

171 On section 1, exhibit 6, the Bench stope is marked here as cribbed and filled, but the boundaries are shown in full around that. I think that was taken because the roof was taken right out level according to earlier surveys. There was cribbing and filling put in there to hold the roof in. The exact dimensions of the uppermost of those three pieces marked "cribbed" are about 6 feet north and south; do not know how much it is east and west, and about 12 feet high, that upper one, and cribbed and filled on the middle one, that would be about 27 feet.

In the Chute stope there is a place marked "483 filled," but the bottom of the Chute stope is marked "filled." It is true of all those places where the ground is filled or cribbed that if we did not know the exact boundaries we would estimate as closely as we could, and we would include the fill or the crib or the cave in all cases in our calculations.

In the Chippie drift stope there is at the southerly end and on the lower floor of it, a little cribbing marked with a dotted line. We could not get into that corner of the stope. The length of that dotted line along the two sides is about 7 feet; that mark "cribbed" there was included in the calculation.

Referring to the map, exhibit 2, the portion of the Elephant stope

there shown, which is marked by broken lines, is right where section line 3 goes across through the Elephant stope, according to the information received from Hurley and Dailey and my recollection of some portions of it, and from our joint measurements.

In the bottom of the Receiver's stope is the word "muck" and that is represented to be about 2 feet high; it is included in the calculations.

The Chute stope colored yellow, the roof running northerly from the end of the Elephant stope for a distance of about 22 feet to a full line and the southerly end of it running from the Elephant stope to a line marked "cribbed" on the floor of the stope, that is dotted. I think the broken lines that I have put on the map are about correct. They are as near correct as I could form any judgment.

Section 4, exhibit 9, 600 top stope is represented on this map, the southerly end being outside of the Conkling line and is marked "caved." There is a portion of the roof inside the Conkling line running northerly for a distance of about 9 feet, that was indefinite; that is, we had no absolute measurements of them. The bottom is

172 dotted from the southerly side line of the Conkling, to the northerly end of the stope as shown on that section; then above that dotted bottom is a dotted line about three feet above it, and the highest point marked "filled with waste." We were unable to reach the bottom at that particular point, and took that from observation and information.

The Elephant stope is marked in full on its floor over the top of the Wet chute, and from there, top and bottom to its northerly end for a distance of about 42 or 43 feet is indicated by broken lines, and was calculated as I have already explained. I think the information was from Mr. Tom O'Neill, who worked the stope; that is, as to the depth of the waste there.

In the Receiver's stope, the bottom floor is shown dotted, and by the words "filled," and "muck" across the bottom. That much is indefinite because we did not reach the bottom of it. There is a place on the northerly edge of that stope marked "filed;" we could not get any farther, but we got right to the fill.

I haven't any northerly line of the stope marked; I do not know; I could not get in there to measure. It was not connected with the Chute stope. The 600 top stope, the floor of that stope is indicated by a broken line as northerly end line; we could measure to the dotted line marked filled with waste, and we took that from information furnished by Mr. O'Neill. That is the depth of the waste he gave from his recollection.

The Elephant stope is shown in full for a short distance to the north of the Wet Chute. The balance of it is shown broken and was calculated as I have already explained.

The Chippie stope is shown broken from its connection with the Elephant stope back to the main stope, a distance of about 14 feet. The balance of it is shown in full line except the extreme northerly; the extreme northerly portion shown in the broken line is the stope drift, and is a distance of about 17 feet. The height of it at the southerly edge is about 4 feet.

The Receiver's stoep as platted on the map is about 6 feet; a little less than 6 feet northerly and southerly, and about 4 feet high. The floor was covered with waste; we did not get down to the floor. We had no information as to the depth of the waste there.

The Receiver's stoep is marked by a solid line on its northerly and upper side to the point marked "filled;" that is as far as we could go, and on the southerly end there is a portion marked
173 "cribbed" and "filled." There are the words "hole through to the Elephant stoep" marked to the upper side in the roof, and the southerly end of that upper side is marked solid, indicating that we had solid rock there.

Section 7, Exhibit 12. The 600 middle stoep north of the Conklingsouth side line, is represented all in full, with the exception of the roof marked "stoep drift" which is dotted; that is a small stoep drift about five feet wide and the height is represented here about $7\frac{1}{2}$ feet.

The 600 top stoep is indicated by full lines, the northerly portion of it seems to be made in two sections here, one portion, the southerly portion, has the end looking towards section 6, and is given as a broken line.

Section 10, Exhibit 15, that portion of the middle stoep inside of the southerly line is marked in full. The 600 top stoep—that bottom is dotted all the way from the line of the Conklings northerly to its northerly end. There is a small line above it marked "filled with waste."

Section 11, Exhibit 16, 600 top stoep from the Conklings line northerly. The bottom of it is dotted to a point about half way up on this northerly end, a distance northerly of about 16 feet, and up about 2 or 3 feet, and there is a line across marked "waste;" roof is shown in full.

On this section the Joint survey stoep is shown in full, the 600 top stoep, northerly branch is in full. The Elephant stoep is broken. The Receiver's stoep is marked in full, excepting for a small piece at the southerly end which is marked "filled," and the little corner marked "filled" at the northerly end.

Section 12, Exhibit 17. The 600 top stoep—the roof is marked in full, but the floor is marked "broken line filled."

Section 13, Exhibit 18. The Toole stoep is shown with a portion of its southerly end full; one set high, dotted up, broken up, this set being planked over, the roof being shown in dotted lines, and the northerly end, a portion of it being shown as broken line, and marked "filled and caved." There is also a full line from that portion down to the next fill, and the floor is represented as being filled for part of the way, filled and caved.

There is also a full line from that portion down to the next fill, and the floor is represented as being filled for part of the way, filled and caved.

174 Mr. Frank Anderson and I made a *joint* survey of the 600 top stoep, 600 stoep and the 600 middle stoep as designated by the map, exhibit 3, and also the Toole stoep. That was shortly after the decision by the Supreme Court of Appeals in 1916. We

calculated the volume of material measured in cubic feet from our notes as accurately as we could; that is, Mr. Anderson and I did.

I judge it is in the neighborhood of a mile from the mouth of the Alliance tunnel the railway depot. There is no means of conveyance of ore from the mouth of the tunnel to the railroad, except by teams; there never has been any other way. You might take it through what we know as the Cut-off to the Silver King shaft; the Cut-off that connects with the top of the Ossian raise. The Cut-off drift was started, I am going to give you my dates of survey, about October 6, 1907; it connected with the Ossian raise January 29th; that was my survey—done a few days before, from the appearance of it at that time, 1908, and my survey to the main shaft was April 30, 1909. The date of my survey just preceding that was March 14, 1909. I see by my notes here that they had a little hole through into the shaft in March. They just had a little hole made through so you could sight there; it wasn't completed at that time, but it was completed at the time I made my survey, April 30th following.

The ore might also have been taken in a roundabout way out to what is known as the Kneal drift, about a thousand feet inside the tunnel, running it through there to the top of the Ossian raise again or down the Toole incline; then out to the 700, then hoist it back again through the Silver King shaft. There was no other way. The distance to the railroad from a point on the surface of the Conklings vertically above the Elephant stope would be fully three miles. The method of transportation could only be by team.

Cross-examination of Mr. Brooks.

By Mr. Critchlow:

I have stated in my explanation that the sections at some of the points that I have fixed either by dotted lines or otherwise, the boundaries of some of the openings, were set down in part from information given by Mr. Hurley, Mr. Dailey and Mr. O'Neill. Mr. Dailey and Mr. Hurley gave me the information about six weeks or two months ago. Mr. O'Neill gave me the information when I was making a survey of the ground, April 13th, I think, 1916. He was foreman there. Mr. Hurley was a foreman there at the time the work was being done. Mr. Dailey was the Assistant Manager.

175 I have spoken of some joint surveys made by myself and Mr. Anderson. The first joint survey was made sometime in 1908, September 30, 1908. An order was made on the application of the plaintiff on June 30, 1908, granting it leave to go in and make a survey.

Prior to the time when Mr. Anderson went in and was making any survey in September, 1908, when I joined with him, I had made but four different measurements in the Elephant stope to indicate the size vertically of the excavations. The last survey I made after the Court made the order of June 30, 1908, and prior to the time

Anderson and I surveyed there in September, 1908, was August 24, 1908.

The only explanation I can make why, after the order of June 30, 1908, permitting the plaintiff to go in and make surveys, I took no pains to make any measurements which would give the extent of the excavations, is that I did not consider it necessary. We had United States patents for the ground. It may be that I was a little lax because I did not have any idea that anybody else owned the ground. As to the proportion of the ground east of the 135 foot strip at that time, my recollection is that the old map that I had showed the line farther to the east than this map does. This line (the westerly end line according to the monuments), was determined after Mr. Anderson and I made our joint survey. I think the old map placed this monument line farther east.

Mr. Anderson's and my survey of the surface was in 1909, if I am not mistaken. From section 3 and westerly of section 3, in the heart of the Elephant stope, there is not a height taken by me which will serve as the datum from which to measure the excavations. I believe that is about true. I have given you all the heights I have in there and their location.

Referring to the Custer drift or "A" drift from the Columbia raise, I do not know of any stoping that was ever done in there, any ore extracted, outside of what they encountered as they ran the drift. The same is true with regard to the "C" drift and the "D" drift.

Referring to the K-K raise, I have a notation in my book referring to that raise on December 4, 1907; it had gone up then a short distance.

January 29, 1908, my notation is "bulkhead" in K-K raise. It is the ordinary bulkhead you put over a raise when you stop running it; the ground was very heavy and caved, and they had it bulkheaded at the top. Mr. Dailey said they would have to abandon that raise and asked me to survey it before it caved in. From that was a drift which had also been run out to its face as shown here, January 29, 1908, called drift from K-K raise. The date given is the last time I was in there. They had quit running it at that time. We crawled through the crushed timbers.

There was a little ore, I think, right at the foot of the K-K raise, but from that point up it went in barren rock.

Referring to the time the Elephant stope was so named, I have my books here, and I observe on September 5, 1906, there is no mention made of the Elephant stope, or on November 23, 1906, or on June 2, 1907, or on August 3, 1907, but it is marked then as the K-K drift, December 4, 1907. It is marked as the McKay cross-cut, Alliance; the word "Elephant" is not used. The first mention made of the Elephant stope is January 29, 1908. It was that last piece of work in there that had the peculiar shape that induced me to give it that name.

I am familiar with a printed report of the Silver King Coalition Mines Company under date of December 1, 1908, by D. MacVichie.

(Hereupon exhibit 22, a map, was offered in evidence and marked by the reporter. It was thereupon withdrawn by the plaintiff by consent.)

(Witness, continuing:) My recollection is that on or about May, 1907, ore was taken from the Elephant stope to the Kneal drift, to a connection made with the Ossian raise, the top of the Ossian raise from the 700. It was then dropped to the 700, run back from the 700 to the King shaft and hoisted to the surface. The difference in elevation would be about 200 feet between the Alliance tunnel and the 700 of the King.

These plan maps which are in evidence here, exhibits 1, 2, 3 and 4, show all of the workings of which I have any knowledge, or any record in the Conkling ground; no others ever came to my knowledge.

Redirect examination.

By Mr. Dickson:

I have stated that the cut off drift was connected with the Silver King shaft at the 500 level about April 30, 1909. After this cut off drift was made, ore from the Elephant stope was taken out through that drift to the shaft. Before the connection of the 177 cut off drift was made with the shaft, some dirt was carried out from the cut off drift to the connection with the Ossian raise. Before the connection was made with the Ossian raise, material was taken out to the Kneal drift at the point marked by my pencil. It came around what is called the Kneal cut off, followed this out back to the Ossian raise and then dropped down to the 700. By making the connection with the shaft through the cut off drift on the 500, a great deal of distance was saved: The distance from the cut off drift out to the Kneal shaft was saved, approximately 1500 feet of distance saved. Then the Kneal drift is a very irregular, crooked drift and in some very bad ground that was sloughing and caving, and it was difficult and wet ground; hard to keep a track in condition. We save about 3,000 feet or more in tramming by using the cut off drift. The cut off drift was driven to afford a closer and better and cheaper connection.

I will now state the stopes that were worked in 1909, and the cubic volume of each.

Hat stope 9,150 cubic feet; Bench stope 33,500 cubic feet; Chute stope 31,165 cubic feet; Chippie Drift stope, 30,480 cubic feet; total 104,295 cubic feet.

The following stopes were worked in 1910:

Incline stope, 29,355 cubic feet. This is the only one worked in 1910.

No work done at all in the Conkling the last six months of 1910, or in 1911 and 1912.

The following stopes were worked in 1913:

Toole stope, 4,505 cubic feet.

In 1914, the following:

Receiver's stope, 18,246 cubic feet.

In 1915, the following:

600 top stope 22,148 cubic feet; 600 middle stope, 16,692 cubic feet; 700 drift stope, 3,402 cubic feet, making a total of 42,242 cubic feet.

In 1916, the following:

The 600 top stope, 14,595 cubic feet; the 704 raise stope 1815 cubic feet; making a total of 16,410 cubic feet.

178 In 1914, after this 600 stope was reached, and until work ceased in 1916, within the Conklings boundaries, ore was being extracted from the stope both inside and outside, being all one ore body.

I wish to make a correction in the statement I made yesterday. There is a continuation of the McKay cross cut around to the right branch that goes through in the Chute stope. I find that the 2 feet wide given of stope shown on the sections, shown here on section No. 2, old floor of drift and the dotted line across, with a space two feet below it, was stoped and had not been included in the computation; but so far as I know it was all waste. There might have been a little ore in it; I don't know. I was in there at times when it was being run; don't remember of any ore of any amount coming out of it. I did not give this to Mr. Dickson for the preparation of the account itself, this ore—that two feet below this drift I haven't got the figures to tell how much it amounts to in cubic feet. I will get them later.

Recross-examination of Mr. Brooks:

The estimates which I have given this morning as to the quantities in the various stopes have been arrived at by me in the past sixty days; at least since the first of the year, I think; that is, they were the figures made up since then.

ANDREW L. HURLEY, a witness sworn for the defendant, testified as follows:

My full name is Andrew L. Hurley. I am thirty-six years old. I am working for the Cardiff Mining Company as superintendent of the mine, where I have been employed three years.

I was formerly employed by the defendant Company. The last time I was employed by it was in 1910; I left there July 12, 1910. Mr. M. J. Dailey was then assistant manager.

I am well acquainted with what is commonly called the Elephant stope on the Alliance side of the Silver King Coalition. I worked in it. I commenced work in it in February, 1907. I was shift boss there until I quit in July, 1910. During the first two or three months I worked for the King I was the only shift boss on the Alliance side. I made a trip in at night as well as through the day.

I was the only one in charge on that side for a time.

179 Referring to the time when we first commenced extracting ore from the ground in question, I will say that there was about six inches of ore inside the drift here near Station 1856.

There was about six inches of ore there. We drove on it westerly. That was along about the latter part of February, 1907. We drove the drift about 40 feet and then had a full face of ore.

I was not shift boss continuously during the period that that stope was being worked. During 1908, I was out of there during five or six months.

I will give the Court a description as clearly as I can in words of the shape of that stope before you get out beyond the Wet chute. The first class ore ran out there in a kind of core probably about eight feet and a half thick at one point in the center and tapered down on either edge to about four feet; the first class. It was about 20 feet wide across the center, then on top of that there was second class. In the center about eight feet and a half in thickness, on top of the first class and ran through in a kind of a trough shape; that is, the stope taken as a whole, that part of it was trough shape. The trough came right down to a point at the bottom, gradually widened out; one wall went out on a gradual pitch; the other came up at a sharp angle, the one on the westerly side. The stope, taken as a whole, including both first and second class ore, was about seventeen and a half feet in the center. That was the highest point that I know of along that section.

This trough shaped body of ore continued back to the Wet chute, a distance of about 130 feet. This core of first class that I have spoken of was in the bottom portion of the stope, in the easterly end of it. It had a thickness of eight and a half feet, and width of twenty feet or thereabouts, and continued with those dimensions—it began to run into the line at station 1859 or along close to that; it began to run into the lime at the bottom.

I remember very distinctly the Wet chute. At the Wet chute the first class ore was not eight feet thick, but it was about as wide—that is, where the values began to get scattered; the stope at that point was possibly about seven or eight feet high—possibly seven or eight feet high at the head of the Wet chute, not the first class ore, but the stope as a whole, including first and second class. I can point out on the map the first work we did before we began stoping in the way of drifting. I mean the first work done for the Elephant stope. We started right at this drift here, right from the winze, K-K cross-cut, and drove westerly, before we began stoping, about fifty or sixty feet, carrying a wide and high drift. Then after doing that we started some miners along the edge of the drift; they started to shooting off more, that is, from this point right here; that is, Station 367. We had commenced stoping before we drove that drift southerly from station 367.

Q. When was that drift driven southerly?

A. This drift here? Well, no, this drift had been driven out here first. It is not marked at the end; the nearest one to it is 4185, marked September, 1908, Frank Anderson.

Calling attention to the marking in this drift, line across it, the date June 7, 1907, is the date of the survey. It was done prior to that time. I may be mistaken in my answer that that drift running

westerly from 367 out to its face was driven before this one was driven southerly; they are both short drifts.

This drift straight ahead from the bottom of the K-K raise out to where that one makes off to the south out to a point about 10 feet back to station 1859, was driven in solid first class ore; that is, the core that I have spoken of, and from a point beyond that the drift began to run into the floor of the stope, going into the waste; this is in some waste out here, I mean that part of the drift ten feet easterly of station 1859. Thence west it was running into waste at the bottom under the ore.

From along about the bottom of the K-K raise it was a full breast of first class ore, and continued to be a full breast of first class ore to a point about ten feet back of station 1859. I don't believe we got any better grade of first class ore any where in the stope than what we had in that drift driven in the core of first class. We got very close to the Wet chute in the year 1907. I had charge of putting up that chute; I believe it was started in 1908.

I left this stope for a few months in 1908, from January to July. I was "pushing" in what they call the cut-off drift going to the King shaft. That was a drift that connected with the Ossian raise, and thence with the King shaft at the 500 level. I mean by "pushing," seeing that the work was done vigorously, and that there was no loafing. I think the Wet chute was put up sometime in May or June, 1908.

Up to the time I left the stope in January, 1908, I had charge of all the stoping that was done in the Elephant stope on my shift.

For a part of the time after they started opening up that 181 stope there were three shifts. The other shift bosses were Ben Lloyd and Oliver Allen. Oliver Allen died some years ago. Then McCann worked there as a shift boss, but not in 1907. Pat Ryan was shift boss there in 1907. He is in town here now or in Park City.

During the first year, 1907, before I went up to the cut off drift, I think that there was practically no waste in the stope. It would not amount to anything. The ore extracted in the Elephant stope up to January, 1908, when I went to the cut-off drift, was about two-fifths first class and three-fifths second class.

When I returned to this Elephant stope about the first of July, 1908, I continued as shift boss in that stope from thence on until the end of that year, 1908. There was waste in the portion of the stope that I worked in in 1908; one-seventh or one-sixth of it was waste. The portion worked in 1908, in which there was this quantity of waste was the Chute stope; I mean that portion in which station 041-D is found. I should say that one-seventh of the material from the Chute stope was waste in 1908.

With reference to the Elephant stope, what is marked here in blue on the map, in that portion of it which we worked in 1908—from the Wet chute or the neighborhood of the Wet chute out to the east, there was waste in the Elephant stope in 1908. I would say about one-seventh of the excavation made in 1908, of the Elephant

stope marked in blue on the map was waste. On west from section line 2 there was about one-seventh waste.

Outside of that line, back to the Wet chute, which I said was 20 feet wide, and 130 feet along, I will say for a small section there, there was about one-eighth, one in eight for a very small section, the value began to run down; that is, there would be one car of first class to eight of second. The grade of the ore ran down gradually close to this good streak here. The proportion of first class ore began to decrease about 20 feet west of the Wet chute. It decreased quite fast as we got out at this end of the stope; I would say one to fifteen, when we got clear to the west end of what is shown in blue there, close to station 3041-C.

In the Joint Survey stope about one car in fifteen was first class ore, and there was some waste in that stope, one-sixth or one-seventh; the same in the Bench stope, one-sixth or one-seventh waste. About one in fifteen cars was first class ore.

182 There was some waste in the Chute stope; one-sixth or one-seventh. About one car in fifteen was first class ore in this stope.

In the Incline stope one-sixth or one-seventh of it was waste, and about the same proportion of first class ore; that is, one car in fifteen.

In the Chippie drift, one car in fifteen was first class ore and one-sixth or one-seventh of the material was waste.

There is a portion of the Hat stope in which there was one car of shipping ore to eight cars of second class ore. In that particular section of the Hat stope there was very little waste, referring to that portion easterly of the Conkling line.

On the northerly side of the stoping shown on Exhibit 2, taking now the Incline stope, the northerly edge of that tapered down to practically nothing, and back on the southerly edge it was fourteen or fifteen feet high.

The Chippie Drift stope on its southerly edge ran down to about four feet.

Now, at the edges, the northerly and southerly edges of the Elephant stope shown in blue, at places the ore got narrowed down to about two feet;—but that two feet was not all ore. There was a little waste broken to give them room enough to work in. We got down to about two feet on the southerly edge of it.

The Elephant stope marked there in blue was practically worked out before I quit in July, 1910.

In the Incline stope about station 2348-A to 2348-B, there was some ore left in there as I remember when I quit the stope. The thickness of it was about five or six feet. With that exception the Incline stope had been worked out when I left. They stopped working in the Chippie drift stope also before I left. The ore was not high grade enough to mine there. The Chute stope had been mind out, also the Bench stope. All the ore had been taken out that it would pay to mine.

There may have been a little ore come out of the Joint Survey stope after I left; but there was very little, if any. It was practically worked out when I left there; The Hat stope was worked out

before I left. I never had anything to do with the stope called the Receiver's stope.

183 Referring to that part of the stope shown on this Exhibit 2 to the west of the Conkling end line which is uncolored practically, boundaries being in blue, or green rather, and all else being uncolored, the ore body there was about the same in respect to the proportion of first and second class and waste—about the same as in the Incline and Chippie Drift stope and Chute stope and Bench stope.

Before the Cut-off drift was connected to the King shaft the ore used to be taken from these stopes, went around what they called the Kneal drift, and was dumped down the Ossian raise to the 700, then trammed to the shaft on the 700. After the cut-off drift was driven to the King shaft the ore from these stopes was dumped into an ore bin on the 500, then hoisted up the King shaft.

After the connection was made directly with the Silver King shaft no ore was sent from the 500 level during the time I worked there until July 1910, except what came from these stopes, but before that connection was made, and when the ore was being taken from these stopes out through the Kneal drift, and dumped down the Ossian raise to the 700, there was ore going up the shaft from the 700 level from a number of other places in the mine beside these stopes. I had charge of some stopes on the 700 also, the Mayflower, Baloon, Mule Barn raise and the McGregor. After the cut-off drift was run to the Silver King shaft, a record of the number of cars of first and second class ore that went up from the 500 was kept.

Cross-examination of Mr. Hurley:

When I commenced to work there I was working for the Kearns-Keith Company, although we used to call it the Alliance. I worked for the Silver King Company after the consolidation, after April.

The stopes are not known to the miners as they are designated on the map, not all of them. I never knew the Hat stope by that name, nor the Joint Survey stope by that name, nor the Bench stope. I knew the Incline and the Chute stopes by those names, also the Elephant stope. These different stopes were clearly defined in my mind all the time. What is called on the map as the Joint Survey stope we knew as the Cloonan end of the stope, Cloonan being the man who worked there.

By the end of 1907, in working this ore body, we were about to the Wet chute here, and going into the leaner ore. My memory is quite definite upon that.

184 The connection between the Elephant stope in blue on the map and the Incline in yellow was made through a drift run, I think, in 1907. It was not all good ore in the Hat stope; I mean by good ore, shipping ore. There was a good grade of milling ore there. When we were in doubt as to the classification of ore we would send a sample to the assay office and have it assayed.

Anywhere from 10 to 16 per cent lead constituted second class ore, and anything higher than that we held for first class ore. We fig-

ured the silver to run in a fixed proportion to the lead; it did run uniform with the lead values. That was my understanding from the assayer. We made our classification upon a lead basis; less than 10 per cent lead went for milling ore. It would go for milling ore down to 5 per cent, and still up to 16 per cent. There might be chunks that would go 45 per cent lead, small chunks, but if they were large enough to be picked out, they were sorted and put in for first class. Some finer stuff might get shot through the low grade stuff. It could not be picked out; it would have to be shipped for milling ore.

We were not able to say what the actual lead and silver content was as the cars were made up, but we knew reasonably close from the reports of the assayers. I am not sure whether our mine cars were 20 or 22 feet, not over 22. That is larger than the ordinary car used in mining.

When I say the Elephant stope was practically worked out in 1910, I mean it had worked down to such a small point around the edge that it was not profitable to mine; the roof was cleaned out.

There was ore left around the easterly edge of the Chippie Drift stope when I left there. As to the Joint Survey stope there was some low grade iron ore along the edge of the drift when I left in 1910. From the floor of the Elephant stope to the top of the Hat stope above was about 14 or 15 feet; the roof of the Hat stope or the roof of the Elephant stope and the floor of both, would be the same thing. The upper section of the Hat stope was all second class ore.

The Receiver's stope was not worked while I was there, that is new work.

Redirect examination of Mr. Hurley:

The ore that was mined in running this drift through the core of the ore body westerly from the bottom of the K-K raise, the first ore that was mined there was not taken directly out of the mine, it was stored in the Crescent cross-cut, cut close to that, 185 about 3,000 feet from the K-K raise, the K-K drift. There was considerable of the ore stored there before it was shipped. There were two or three drifts quite well-filled up with first class; I would say a thousand cars of first class. There was very little second class through that section of the stope. It wasn't part first and part second class. It was all first class. I believe the first shipment that was sent to the smelter was all crude ore, but I have not examined the returns of the shipment to see whether any of it was concentrates or not; but there wasn't any second class going out of there at that particular time; must have been crude ore. The first shipment was made very shortly—just about the time of the consolidation, whatever time that was.

The Elephant stope was practically worked out when I left there. There was nothing in it in my judgment that could be taken out, mined or treated at a profit; that is, in the Elephant stope. As a general rule with rare exceptions you could tell reasonably close by looking at the ore we were mining whether it was shipping or mill

ore. There were not any assays made or necessary in order to determine this classification; not very many; it wasn't necessary. Sometimes small pieces of good ore might go forty or forty-five per cent lead, too fine to be sorted out from the rest; got in with the milling ore; take too long to sort it out. We sent ore to the mill that ran as low as five per cent lead, I judge.

While I was shift boss I visited these stopes shown on the map here, in the early history of the stope, twice a week, and during the latter part of the stope, four or five times a day; spent practically nine-tenths of our time in there. At that period we only had that Alliance side to look after. We did not have to go over on the King side.

I refer to the latter part of 1909 and 1910, up to the time I left. We spent about six hours out of eight in the stope. It was certainly my duty as shift boss to observe the character of the ore that was being mined and classified and classify it as first or second class, and I did that every time I went into the stope. We could not prevent some high grade getting in with the second class, because in blasting it it would break, some good ore with the poor ore. It would be so small we could not pick it out. Sometimes it was as small as a pea, even smaller. Large pieces of high grade never got into the second class to any extent. Large pieces were sorted out. We would take out any first class that could be readily picked out. We sent first class to the smelter and second class to the mill.

186 I knew Mr. Nicholas Treweek in his lifetime, and remember his spending several days visiting the easterly portion of the Elephant stope when I was there. He would be in company with a Mr. Gillette, and his son Samuel Treweek. I remember them being here in this portion of the stope, 30 feet westerly from the bottom of the K-K raise. It was in 1908. It was during the time I worked in the cut-off drift, but I was in the Elephant stope here showing these gentlemen around.

I was shift boss and the foreman over me in this particular work was Frank Dailey. Ben Lloyd was shift boss, Pat Ryan was a shift boss, Dan McCann was shift boss. Don't think McCann was there in 1907. I know he was there the latter part of 1909, and a part of 1910. Bill Kneal also was there as a shift boss in 1909 or 1908; but he is dead now.

(Witness, continuing:) The ground around what we call the Wet Chute was wet and hard to hold, heavy ground; great weight on the timbers. It would crush the timbers. It would crush bulkheads that were built five or six or seven feet high, crush them down to a height of three or four feet, down to a solid mass of wood; bulkheads built of 8 by 8's. In order to hold the ground these bulkheads were filled in with waste, filled in practically solid from the floor to the top, still they would be crushed in.

We wouldn't intentionally send ore that went better than 16 per cent lead to the mill.

Mr. Critchlow: We will stipulate in respect to Mr. Frank Dailey, whom you say is in Idaho, that if he were here he would testify as Mr. Hurley did, if that will suit you.

Mr. Dickson: Yes, thank you.

THOMAS KEARNS, a witness sworn for the defendant, testified as follows:

My full name is Thomas Kearns. I am a resident of this city, and director and vice-president of the defendant Company.

The defendant Company was organized in May, 1907. Prior to that time I was President and Director of the Kearns-Keith Mining Company from the time of its organization until it conveyed all its holdings to the defendant Company here.

I have been mining in Park City thirty-four years. I have been everything from a tool boy up to President of a mine. I have been interested in mining all the time, and have worked at it almost continuously. I have had charge of mines, directing the running of drifts and other openings in underground mines.

I am acquainted with what is sometimes called the Alliance tunnel and sometimes the Crescent drift. I have been in it very frequently, and was in it when it was being worked and driven ahead. I am familiar with the character of the ground it was driven through. I am able to and I have formed a judgment as to what the cost per foot would be of driving that tunnel through the ordinary ground through which it was driven. My judgment is that a reasonable and necessary cost per foot of running that tunnel through the ordinary ground through which it runs, not speaking of bad ground, would be from \$12.00 to \$20.00. I make that variation because it is a very long tunnel, and the farther in it you get the more it would cost. Farther in the air becomes bad, the labor not so efficient and the movement of the material requires more labor. You would have to lay ties and rails as the work progressed.

This tunnel was the only means of reaching the ore, unless a shaft had been sunk. The shaft would have to be 1,360 feet deep, and of at least two compartments, although it is customary to sink them with three compartments. The minimum cost per foot of a two-compartment shaft and man-way 1,300 feet, including the necessary machinery that would be required, would be \$60.00 a foot. That would include the cost of machinery. Machinery would cost from \$6.00 to \$10.00.

FRANK O. HAWKINSON, a witness sworn for the defendant, testified as follows:

My name is Frank O. Hawkinson. I am a miner; I have been engaged in mining since 1896 in Park City. I work for the Daly-Judge Mining Company at the present time. I am keeping the shaft in repair.

I was employed by the K-K Company at the time Mr. Walden was driving the Alliance tunnel or Creseent drift. I was timberman, also machine man; had charge of the timbering in that tunnel. We encountered very difficult ground. At times several hundred feet of difficult ground. I remember one very bad place, about 60 feet long; but there were hundreds of feet that were bad.

We had to drive back spilings. I would be digging in the front and two spile drivers behind me. When I would pick out
188 two or three inches of ground I would call my spile driver;

I would call him to keep driving. Spile drivers would keep driving while I was here digging. We had to put in breast boards. We put in half sets, 2 feet and a half from center to center. We often had to use hay or straw to keep the ground back; often putting hay and straw in gunny sacks to fill in the space. There were times in that very bad ground when it would take more than a day to get a set in; it would take several days. There were so much water at times that washed away the face of the drift, and fill it up with sand. We would sometimes have to go back four or five sets and start in again in better ground.

(Model produced by the witness to illustrate the work of spiling was marked Exhibit 23.)

MICHAEL J. DAILEY, sworn for the defendant, testified as follows:

My full name is Michael J. Dailey. I live in Pocatello, Idaho. I am in the hardware and implement business now. I was formerly an employee of the Silver King. I left that employment the first of July, 1910. I was with the Silver King Coalition Mines Company from the time of its organization to the time I quit in 1910, as superintendent and assistant manager during all that period. I also worked for the K-K Company from the time it was organized until it was absorbed by the present defendant.

I had work done in the Alliance tunnel before Mr. Walden went there to work. It was the cleaning up and repairing of the track. I commenced cleaning out at the very mouth of the tunnel at first, cleaning up the rock that was down on the track, clear back to the mouth of the Alliance tunnel. There was very little cleaning in the tunnel until I got in about 600 feet past what we call the day-light switch, at the turn. I commenced cleaning practically at station 131, on Exhibit 1. I cleaned it out westerly from that point as far as the Treweek raise. The face was a little southwesterly of that raise at that time, about 50 feet, I should judge. From station 21 to the Treweek raise, the greater portion of the distance was just where lagging was broken and rock on the track, until we got into a place where there was a switch; I do not recognize it on this map.

From there it was caved solid for probably 75 or 100 feet. We had to take all that dirt out and retimber it. The drift was filled
189 full of boulders and loose dirt and rock, and the track was broken down. For the rest of the drift with the exception of a couple of very small caves, we had nothing to do but

put in lagging and a set occasionally and clean up. That would be for the entire distance. We had to put in new ties and relay the rails. In fact we took up all the old plank, all the old rails, and put in heavier equipment, heavier floor and heavier rails. They were formerly 12 pound rails; we put in 34 pound and 40 pound rails. We put in heavier rails so that the track—we would not have trouble with the tracks, and have our trains getting into a ditch on us. With those 12 pound rails very often we had wrecks; the floor, the plank and the cross-ties until we changed them were all insufficient. I believe the heavy rails were right in that McKay cross-cut from the mouth of the tunnel.

Mr. Critchlow: Do I understand, Mr. Dickson, that they first ran the tunnel with the lighter rails, then changed to the heavier ones?

Mr. Dickson: When they began taking out the ore, they changed to heavier rails, or about the time they commenced taking out ore.

(Witness, continuing:) There was a ditch in there that carried off the water; it was under the track, of course. The ditch was about the full width of the tunnel; at times we had to enlarge it, dig it deeper. On account of the insufficiency of the 12 pound rails we would have these wrecks and the cars would go into the ditch, so we put in heavier rails and a better foundation. My judgment is that the cost of cleaning out the tunnel, that portion that I did clean out, would cost about \$1.00 or \$1.20 a foot; that is, where the drift was not caved solid and we just had to put down new track and new floor, and those heavy rails where we had to clean out the solid drift that was caved and put in new sets, it probably cost three or four dollars a foot—say for 75 or 100 feet to the switch; then there were two other minor caves that I think would cost three and a half or four dollars a foot, and then the balance we will say a dollar or a dollar twenty-five cents a foot; that is my best judgment.

I remember when the ore was first struck in the Elephant stope. It was October or November, 1906, in the McKay cross-cut. I will point it out on exhibit 2. I am pointing to a place near station 1,856 as near as I can get at it. It was in that immediate neighborhood anyway. There was some stoping done there about the time of the organization of the Coalition, or before, which would be in April or May, 1907. We drove westerly 30 or 40 feet from station 1,856 before we encountered a full face of ore in the drift.

With reference to the bottom of the K-K raise, I believe there was a full face of ore 20 or 25 feet southwest of the K-K raise. I am counting from the center of the raise, the man-way; I am giving you the distance approximately.

I remember the piece of work called the cut-off drift that connected with the King shaft at the 500 level. Prior to that connection the ore was taken from these stopes here out through the Kneal drift down through the Ossian raise to the Silver King 700 and out on the Silver King 700 to the Silver King shaft, and then up the shaft to the surface. At that time there was ore being sent up from the 700 level to other parts of the Silver King mine. We

were mining at that time in the north or Mayflower slope, and that we went up from the 700; and also on the northwest side of the shaft, and we were mining in the Mule Barn slope and the McGee slope at that time, and the ore from all those slopes, as well as from the Elephant slope went up the shaft from the 700 level.

After the connection was made on the 500 level the ore from the territory in controversy went through this cut-off drift to a receiving bin at the 500 foot level near the shaft. The bin was about 25 feet from the shaft. Its capacity was four or five hundred tons. While we were sending ore from this slope out through the Knoll drift and down to the 700, and then up the shaft, we did have a system throughout the mine in 1907, to distinguish the shipping ore from mill ore. We put two pegs in the first class ore and one in the second class ore; that was the method in force throughout the entire mine, including these slopes.

I do not know how early they began that practice of pegging that ore, but it was being done when I went to work there. After the connection was made through the cut-off drift with the shaft at the 500 level, all of the ore from these slopes in controversy went through that cut-off drift directly to the shaft or to the ore bin at the shaft, and no other ore went up from the 500 during the time I worked there—until July, 1910.

From the time the connection was made on the 500 level — established at the Silver King shaft what was called a tally board. It was a board about one foot wide and two feet in length. At the top it had four or five small holes and pegs in it. Down the side of that board we had either two or four rows of holes, 10 to the row. We had

more than two; we had four anyhow, rows of holes with an
[91] holes in each row. At the bottom we had two rows of holes,

as I remember it, across the tally board with ten holes in each row; at the top of the board there were marks to indicate first class, second class and waste. The rows in which the pegs would be put were up and down the board. I think we changed the form of our tally boards at one time, but I don't remember just when. I am not positive how many rows of holes there were, but the pegs regularly put in the holes in the board would indicate the number of cars of first class, second class and waste that had been sent up. The mine loading cars on the cage would peg the tally board to show what he loaded. The sum of first class, second class and waste at the end of the shift would be recorded. Our station tender would not allow his tallying to go over until the next shift; otherwise they wouldn't know how much was sent up on each shift, and the men on the shift wouldn't know whether they were getting proper credit for the work they were doing if they allowed the tally from one shift to go over on to the next.

After the connection was made at the 500 we had three shift bosses for each 24 hours, whose duty it was to tend the 500 station. There was Lloyd and Allen and Con O'Neill. The shift bosses when they went off shift would go to the different levels in the mine and make a note of the number of cars indicated on the tally board to have been sent up from the respective levels. They would make those notes in

a book they carried with them, or a sheet of paper. It was their duty to make such a memorandum anyway; that is, a memorandum of the number of cars of first class, second class and waste that went up from each level on each shift. They would do this just before coming off shift. When they took the record off the tally board they would take the pegs out of the recording holes and put them back in the receiving holes—we call them the zero holes, ready to start anew.

The 500, after this connection, was the highest level being worked, I think. There was also a tally board at the top of the shaft and the top car man made a record of the tally board there. The top car man would make a record by pegs on his tally board of every car that came up, no matter what level it came from. The station tender hoisted rock from all the levels in the mine. During that period they would take in the 500 as well as the 700 and 900.

I remember Bart Mahoney was a station tender for quite a long time, also E. S. Maxim. William Barben tended station there for a long period. There were others, but I cannot recall the names of all of them. There was one named Emil Bjork. There was one station tender named Richard Fleming, who is now dead. There was one named Salmi, but he wasn't in my time. There was Patrick Meaney, but he was there after I quit. I can ascertain from the time books or payrolls who were station tenders during all the time after that connection was made until I quit. I have a list here that I made up from the time books or payrolls.

John Forsman tended station for a short period. Richard Fleming, deceased, and George Prudence tended station there. All the books in which these shift bosses made their entries are still in existence from the time the connection was made with the 500 down to the time I quit.

We had a little office there in the hoisting works, close to the shaft, and a book there in which to record the amount of cars hoisted on each shift, and when the shift bosses would come off shift they would go to that book and record this information. At the end of the month I would have the time keepers compile these books and make a statement of what each shift did during the month for my own information. I had a book for that purpose. The time-keeper would record this in my book, as I remember it, and he would keep a copy for the company. The record was kept in a loose-leaf book. I have been able to find those leaves for the period between the time when the cut-off drift was run to the shaft until I quit. I cannot identify the figures made on these sheets by the time-keeper, because they were made with a typewriter.

By the end of the year 1907, I think the stope had not reached as far as the Wet chute, but I am not positive of that.

The first ore that was mined from the Elephant stope was not sent directly out of the mine; it was kept in the mine; it was stored in a drift in the tunnel. It was shipped just a little before the formation of the Coalition Company. There is a record of those shipments in the Company's office, showing how many tons of first class and how many tons of concentrates went out in that shipment, and the value of the smelting returns; it was more than one shipment, and the

record shows the total tonnage of first class and total tonnage of concentrates and the values of each shipment.

My recollection is that for the first hundred feet or so of this Elephant stope along on the right hand side of the stope 193 was quite a core of first class ore. In the right hand side of the stope going in the wall stood up fairly straight for a distance going in. I mean anywhere from 60 to 70 degrees from the horizontal. The other side tapered out and ran up flatter on the foot-wall, at about an angle of 15 or 20 degrees.

In the ore taken out clear up to the Wet chute, which I think was not reached until some time in 1908, there was about from one-tenth to one-fifteenth waste in the Elephant stope up to the Wet chute. From the face of where we started at the bottom of the K-K raise, westerly, to the Wet chute, there was waste taken out; my recollection is about one-tenth of the cavity was waste. That waste was stored back in the stope. I cannot point to any particular spot, but it was stored all through the stope, different portions of it, until we go out to the Wet chute, anyway, whatever that date was. About one-third of the ore was first class.

It was my duty as superintendent and assistant manager to pay attention to the character of the ore being mined whenever I was in the stopes; that would be the object of visiting the stopes. Westerly of the Wet chute my recollection is that of the ore mined in 1908, about one-eighth of it would be first class. That includes all the ore that was mined in that year, 1908. That would be a fair average in my opinion of all the ore mined in 1908, from these stopes. I mean that in 1908, there was taken out from these stopes, according to my best recollection, one car of first class to eight cars of second class. I am speaking of the whole stope throughout in that year. I am speaking of the entire stope outside of that easterly end—outside of that line easterly of the Wet chute. That would be true of this portion of the stope shown here on exhibit 2, in white to the west of the west end line of the Conkling.

There was waste in the Bench stope, one-sixth to one-seventh of it was waste; about the same in the Joint Survey stope, same in the Incline stope; same in the Chippie drift stope; same in the Chute stope; same as to the stoping shown on this map outside west of the Conkling. The waste was stored right back in this stope. I remember several pillars of waste put around this chute at station 3041. I mean by a pillar of waste a block of waste, a section of waste put in the stope from the foot up to the hanging solid, down along beginning at station 477, and down this Incline close to the track, all the way down to the bottom, from the Incline stope. There was 194 also several bulkheads or pillars of waste put in this blue stope at about section 10 or 11, as I remember it. This waste came out of the westerly end of the blue stope. It was carried back there and stored.

I started to work in the King mine in August, 1892, and I worked there until July, 1893. The mine closed down for three months. I started again in the King along in July, 1893, and worked until

April, 1894. I then went in the office for five year; went back to the mine again in 1899.

The drifts from the Silver King mine are shown about the same size, but the Alliance tunnel is larger than the mine drifts. The average of the drifts was about five wide by seven high. All of the mining and all of the drifts run in the Silver King side are driven in either *line* or quartzite. There were a good many in limestone, and the drifts in this territory here that we are talking about on the Alliance side, in connection with or a short distance from the ore bodies, were driven in limestone, except those driven on the fissure, and they had porphyry and crushed quartzite and mineral in them.

In driving a drift there would be employed two men on a machine and one man shoveling generally. Machine-men received \$3.25 a day, and the shovelers \$3.00, and then there was a skinner on each shift as a rule who received \$3.00 a day. It was my duty to observe the progress of the work and I did it. In 24 hours they would drive from four to six feet. In addition to the labor cost of driving drifts there would be air drills, powder, fuse and caps.

DAVID KEITH, a witness sworn for the defendant, testified as follows:

My name is David Keith. I live in this city.

I have been President of the defendant Company since it was organized. I am a miner by occupation and have mined principally on the Comstock in Nevada and Park City during the last forty years.

I am familiar with the work known as the Alliance tunnel. I drove it for 4,800 feet, took the contract in May, 1889, and completed the work in August, 1890. I have been through the tunnel often, west of the point where I drove it on this contract. In my mining work I have sunk shafts and driven drifts while foreman and superintendent of mines, many thousands of feet, in limestone as well as in other rock.

195 Judging from my years of experience and my acquaintance with the rock through which the Alliance tunnel was driven from a point eight or nine thousand feet from its mouth—speaking of average ground through which the tunnel was run, the reasonable and necessary cost per foot on an average where the ground was not bad, would be 18 or 20 dollars a foot.

Cross-examination of Mr. Keith:

The part of the tunnel that I have in mind in saying that an average cost would be \$20.00 a foot, was the part of the tunnel driven from the point where we left off. I said we ran it 4,800 feet. Some of it would cost a great deal more than \$20.00 a foot.

M. J. DAILEY, being recalled, continued his testimony as follows:

Taking the years 1905, 1906, 1907, 1908 and 1909, I can give you the amount of development work done in each of those years, and will point out on the map where it will be found and give the cost per foot.

Taking the year 1905: There was 250 feet of drifting all within the Conkling ground. That is made up of more than one piece of work.

Beginning at station 660 to station 664, that is a distance of 185 feet. That same year, the development work 130 feet: From McKay's cross-cut, from station 660 to station 660 plus 130 feet, marked here on the map in red.

That 185 feet was driven through limestone. Of this 185 feet, along to about station 661, there was quite a lot of water; it was timbered in the ordinary way with tunnel sets and lagging. My judgment is it cost \$26.18 a foot. It was slow work.

The 130 feet in McKay's cross-cut: My estimate of that is \$12.00 a foot; I think it reasonably cost that.

In 1906, there was drifting all within the Conkling ground, 326 feet. I estimate that at \$12.00 a foot. I think it reasonably cost that.

In 1907, the development work all within the Conkling, 140 feet, completed before June 1, 1907, from station 1855; that is what is marked east drift, McKay cross-cut. The face is marked "June 2, 1907." I estimate that east drift also at \$12.00 a foot. The east drift cost that much.

196 In 1908, they have 14 feet here widening out the drift, running out to that portion of the drill hole drift, that is within the Conkling claim; that was hard ground to work in, and it had to be spiled. According to my best judgment it cost \$23.18 a foot, that 14 feet—that is according to the estimate furnished me, and according to my judgment as a miner, it is a reasonable sum. There is another item 96 feet of drifting in 1908. The estimated cost as given to me was \$15.36 per foot, and in my judgment as a miner that is a reasonable sum.

There is another item of 120 feet in 1908—from station 2010 plus 2 feet to station 3039 plus 10 feet on the Conkling west end line. The estimated cost of that 120 feet was \$12.00 a foot, and according to my best judgment that is a reasonable sum.

In the same year there was switch and powder magazine, equal to 61 feet. It begins about station 4462. That work is much wider than the ordinary drift. The estimated cost of that work was \$10.00 a foot, and I think that is a reasonable sum.

Then in the same year, 1908, there is another piece of development work described in the account as a raise, two compartment, 15 feet. It is known as the Wet chute from the notes I have from Mr. Brooks, so marked on Exhibit 2. In my judgment that two-compartment raise cost at least \$18.00 a foot.

We will take the year 1909. There is a drift northerly from station 247, 19 feet. A drift north from station 2285, 38 feet; drift 21 feet above tunnel level from station 3037, plus 31 feet. There is a drift 11 feet above tunnel level from end of stope on

south side line of Conkling. The reasonable cost of all this work in my judgment was \$10.00 a foot.

From station 660 to 667, that wet ground went outside of the Conkling end line; that whole distance was wet. It was red shale and running ground; it was spiled. That work cost between \$26.00 and \$27.00 a foot.

Going back to the Elephant stope shown in blue on exhibit 2, the shipping ore was in the bottom of the stope.

The highest point in the stope from the east end out to the Wet chute was 16 to 18 feet; that is the greatest height of the stope at any point. The minimum height would be 2 or 3 feet. I mean that the greatest height of the stope was along southwest of the K-K raise. The greatest width of the shipping ore would be seven or eight feet, maybe not eight feet, seven feet. Perhaps I 197 misunderstand you. I thought you asked for the greatest thickness. I mean by thickness from hanging to foot. If you are speaking about the width of the core of shipping ore, the answer is 18 to 20 feet. The greatest width would be along about sections 11 or 12, in that neighborhood. (Referring to the map, exhibit —.)

I am referring to the entire stope, the cavity. I am not speaking from foot-wall to hanging wall now, but my recollection is that the shipping ore kept its width fairly well until you got out to the Wet chute or close to it, from 18 to 20 feet. When you got out to the Wet chute the ore was pretty badly mixed, as I remember. We did not have there a clean body of shipping ore.

Coming back to the K-K raise westerly from there, milling ore lay on top of the shipping ore. For a great portion of that stope the first class was right up against the waste limestone in the bottom. On the southerly side of the stope before you reached the hanging wall of the stope the material we had there was second class and waste.

I believe the Elephant stope was pretty well mined out at the time I left—the first of July, 1910. There was some ore left, no—not in the Elephant stope proper. I often speak of all those stopes as the Elephant stope; it is divided up into different names now.

Speaking of the Elephant stope as that which is uncolored in blue, I don't know of any ore being left in the Elephant stope when I quit the mine. The Bench stope was stoped out. There was no ore in sight left in what is now called the Joint Survey stope; nothing that would pay to mill in the Chute stope. There was nothing that would pay to take out in the Chippie drift stope when I left. I was in these stopes at least twice a week before I left. In going in my object was to examine carefully the grade of the ore, the timbers, and to instruct the shift bosses what to do—to lay out the work for them for a few days at a time. It was my duty to observe the character of the ore that was being mined, what was first class and what was second class.

When I quit there was ore left in the Incline stope. It was down along about station 2448-A and 2350 and 2348-B. There was also a little zinc ore left in this stope.

I will give you the names of all the station tenders on the Silver

King side of the 500 level from the first of April, 1909, to the time I quit.

There was William Barben. He lives in Idaho now, close to Bellevue on a farm.

198 There was Emil Bjork, Bart Mahoney.

I have examined the payrolls and time books of the defendant Company and ascertained the period of time each of these men worked as station tender.

Mr. Critchlow: At this point, not for the purpose of making a suggestion, but for the purpose of making an inquiry, evidently this testimony is given by the witness from his examination of certain records. Is it expected that those records will be brought here and made subject to our inspection?

Mr. Dickson: Surely.

Mr. Critchlow: I will not then make any objection.

(Witness, continuing:) I haven't brought the time books and payrolls here this morning, but I will bring them before court meets again. I will give the days in each month from the record between the first of April, 1909, and the first of July, 1910, that each one worked there.

William Barben, May, 1909, 12 days as station tender; in June 29 days; July 28 days; August 31 days; September 29 days; October 31 days; November 28 days; December 28 days; January (1910) 30 days; February 25 days; March 17 days. Apparently Barben quit in March, because his name is transferred from the regular order on the payroll over on to the time sheet payroll. The last work William Barben did as station tender was in March, 1910, apparently.

The next station tender is Emil Bjork. These are the days he worked there: 1909: April 29 days; May 19 days; March (1910) 2 days; April 17 days; May 31 days; June 29 days; July 30 days.

The next station tender is Emil Bjork. In 1909: June 10 days; July 26 days; August 31 days; September 29 days; October 31 days; November 30 days; December 27 days.

In 1910: January 25 days; February 72 days; March 31 days; April 30 days; May 27 days; June 29, days. He worked 30 days in July after I left there.

The next is George Prudence. In 1909: April 24 days; May 31 days; June 3 days. I could not find any record of him working at station tender in 1910.

The next is John McClean. 1909: November 3 days; in 1910: January 11 days. That is all McClean worked as station tender.

199 The next one is George McCarrell. 1910. February 3 days; March 14 days; April 2 days.

The next is E. S. Maxim. 1909. May 25 days; June 20 days; July 3 days; December 2 days. No record of Maxim working in 1910 as station tender.

The next is John Forsman. 1909: May 5 days only.

I have given you the names of all the station tenders during the period mentioned; with the exception of Mr. Dick Fleming, now deceased. His record is as follows:

Dick Fleming, 1909: June 27 days; July 28 days; August 31 days; September 29 days; October 31 days; November 27 days; December 30 days. 1910: January 24 days; April 30 days; May 28 days; June 29 days.

Then there is Tim F. Sullivan. I have tried to locate Tim Sullivan, but I haven't been able to find him. He worked in 1910 as station tender as follows: February 27 days; March 29 days; April 12 days.

These are all the names that I can find on the payrolls and time-books during the time mentioned; that is, of station tenders. When we were working three shifts we had station tenders on each shift.

There was comparatively little work going on in the mine after the panic of 1907. We began reducing the force in January, 1908, and did not resume operations with the increased force until along in June or July. During that six months there was very little work going on in the Elephant stope and so in the rest of the mine.

I can also give you the names of the shift bosses on the Silver King side during the period of April, 1909, to July, 1910.

Mr. Critchlow: May I ask at this point so we may follow the testimony, the object of segregating the testimony as to these men into the period from April, 1909, to July, 1910?

Mr. Dickson: After April, some day in April, 1909, the ore from these stopes was shipped out through the cut-off drift. Prior to that time it went down to the 700 and from the 700 ore went up the shaft from all over the mine, and we couldn't tell how much came from any one stope.

(Witness, continuing:) Ben Lloyd was shift boss the entire year 1909, and from January to July of 1910. Shift bosses received \$5.00 a day.

200 Con O'Neill also was shift boss during the same period. I have overlooked getting the time O'Neill worked there.

Dan Lahev was there quite a period. He was there during 1900 and 1910. He is now dead.

Oliver Allen also was a shift boss on the King side, but he is now dead.

I will give you the names of the shift bosses on the Alliance side (that is, on the side where these stopes in controversy are located), during 1907 and 1908, down to May, 1909:

Dan McCann was shift boss on the King side in 1907. Andrew Hurley was shift boss on the Alliance side. Lloyd may have worked over there for a short time; I don't remember whether he did or not; but a man named Ryan worked there as shift boss on the Alliance side.

Very seldom did we work three shifts in a stope at any time.

I remember the occasion when I requested Mr. Brooks to fix the westerly end line of the Conklings mining claim; that was before we commenced stoping. The property west of the line fixed by Mr.

Brooks was the Belmont property. The Silver Hill, I believe, was one of the claims.

Mr. Dickson: Will the plaintiff admit that the Silver King Coalition Mines Company did not acquire or its predecessors in interest did not acquire any interest in either the Silver Hill No. 4, or the Custer No. 2, prior to the second day of February, 1907?

Mr. Critchlow: Yes.

(Witness, continuing:) The Elephant stope was one of the heavy stopes in our mine at that time. I am speaking of the entire stope. It required more timbering than most stopes in the mine. We had to use stulls for head-boards, and often put in bulkheads to hold up the back—the hanging country; that is, the overhanging wall. The top was dry but quite flat with large slabs overhead, all the way from a few inches in thickness; slabs that were liable to fall at any time unless they were supported by timbers. Often we had to take these slabs down, not being able to put up under them supports heavy enough to hold them. There were slabs there that were blasted down that would be three or four feet in thickness, 12 or 15 feet square probably in places. That, of course, enlarged the cavity.

201 During the time from April, 1907, down to the time I quit in 1910, I don't know of any person running a custom mill in Park City for the treatment of ores. The Conklings Mining Company had no mill.

After this litigation commenced, I never refused admittance to the property to Mr. Anderson, the engineer of the plaintiff Company. He was at Liberty at any time to go into these stopes and make surveys of them.

Cross-examination of Mr. Dailey:

During the time I was foreman my superior was Thomas Kearns. I was next to him in authority. I was afterwards made Assistant Manager. I believe it was in 1903. My duties as foreman and assistant manager were to go through the mine and examine the ore bodies, and examine the timbers—everything in general in connection with the mine.

Mr. Thomas Kearns, the general manager of the property lived in Salt Lake, and came only occasionally to look over the property. He spent a comparatively small portion of the time there. When he did come up he did not visit every portion of the mine.

My brother, Frank Dailey was foreman at the time we discovered the ore in the Elephant stope, I believe. Under Frank Dailey were the various shift bosses, but I put in as much time under ground as Frank Dailey or any other employee of the Company that had charge of anything; the shift bosses, however, being there every day, would be better informed regarding the details on the Alliance side than I was.

The Alliance tunnel was cleaned out for the purpose of prospecting that country. I selected Mr. Walden for the work that he did. I was acquainted with his qualifications and I knew they were suffi-

cient. He received a regular salary of a shift boss. The Alliance tunnel, or the Crescent drift, as it was called in those days, in the place where I began to extend it; was run to prospect the Crescent vein—the south end of the King territory or the Kearns-Keith, or whatever it was.

(Hereupon exhibit 24, a sketch map of the Alliance tunnel and workings therefrom from the mouth to the west end of it was introduced in evidence.)

My recollection is that we ran the Kneal drift several years after we cleaned out the Alliance tunnel.

202 I didn't get up the account for Mr. Dickson in respect to the cost of running these various workings that I have testified about this morning; I believe that it was gotten up by Mr. Walden and Mr. Brooks. I first knew about what costs had been fixed in the account for these workings a few months ago. When I first saw the account the figures on it in respect to the cost of this work I have testified about, were the same as they are today as far as I know. I have made my own estimates about the cost of cleaning out the tunnel. I don't remember ever seeing it stated in the account what the cost of cleaning out the tunnel was, and so I could not have called attention to the circumstance that the costs in the account were higher than I have stated.

According to the map, exhibit 24, the drill hole drift was started off as early as August 25, 1908. It was called the drill hole drift because the Hanauer tunnel ran in about there and we started a drill hole there for ventilation; ventilation was quit poor in the Alliance tunnel, and we ran that drift out to make connection with the drill hole, and also to drain the country.

I told you we first discovered the ore at about station 1856; the ore was there lying conformable to the bedding, and we followed the ore out to the southwest.

We did not have a surveyor continuously at the mine. We had Mr. Brooks survey when we thought we needed him, or whenever he thought we needed him. He was expected to come when we asked him to come. His office could be relied upon to give us surveys when we needed them. As a rule I told him to survey everything up to date; whenever he was up there I wanted him to survey all openings up to date, unless he was called off to some other job out of town, as he frequently was. If there was any work that was necessary to be done and I needed any points I wouldn't let him go until he did it for me. What I got him up there for was to measure the points so I could make necessary connections and keep up the surveys and keep up my working map. The working map which would be my directions and show where I was within any particular drift. I recall that I called him up to make a survey when I struck that ore at station 1856, because Mr. Kearns had told me not to go into the Belmont ground. I telephoned Mr. Brooks; he told me how far it was to the Belmont ground; I don't remember how far he said now; but I didn't go into the Belmont ground. I confined myself to his directions, and I didn't go into the Belmont ground.

203 It was October or November, 1906, that we struck the ore near Station 1856. When I struck the ore I continued working on it westerly, but I didn't go as far westerly as the Belmont ground before stopping. I ran to what we believed to be the end line of the Conkling at that time; but I cannot show you on the map where we stopped. I don't know how long a time I continued running westerly. I know I was willing to continue to run westerly and take out the ore as long as I wasn't in the Belmont ground.

I don't know when I learned that the Kearns-Keith was not the sole owner of the Conkling claim; but I know that every pound of ore I ever took out while working at the property I thought belonged to our Company. The true end line of the Conkling claim was only important to me because I was instructed to stay out of the Belmont ground, and I endeavored to do so. Nothing was said to me about any discrepancy in the boundaries of the Conkling claim, so far as I recollect. That was eleven years ago, and I know that at one time I heard that there was a dispute about the boundaries between the Silver King Coalition Company and the Conkling Company. I must have known about the dispute prior to 1908, when the suit was brought. I never thought though, that the Conkling Company was a co-owner with the King in that ore; I thought the King owned the ground out to the westerly line, and I also believed they had the apex of the ore. I always understood that we had the apex of that country. I do not say that we had the apex of the Belmont ground. I mean to say that when I was working in the Conkling stope taking out the ore, I was instructed to take it out, and instructed that they had the apex, and the ground belonged to them. As to why I did not go into the Belmont ground if we had the apex, I want the Court to understand that I was specifically instructed by Mr. Kearns not to go into the Belmont ground. I was told that we did not own the ground and to stay out of it. I knew nothing at that time about the 135 foot strip.

The letter that you exhibit to me now dated December 19, 1907, signed by Nicholas Treweek and J. Leonard Birch addressed to the Silver King Coalition Mines Company I see for the first time; it was never called to my attention before, either the letter or the facts referred to in it. I knew nothing about it. It is my best recollection that I never did refuse admission to Mr. Treweek or Mr. Birch.

You exhibit a letter now to me dated January 2, 1908, addressed by Thomas Kearns to Nicholas Treweek and J. Leonard Birch. After reading that letter my memory is not in any way refreshed, because this is the first time I ever saw it. If Mr. Treweek or Mr. Birch was ever denied admission to the ground by my superiors, they never notified me of the fact. I recollect nothing at all about this letter.

The two letters last referred to were introduced in evidence by the plaintiff and read as follows:

"Salt Lake City, Utah,
December 19, 1907.

To the Silver King Coalition Mines Company,
a corporation under the laws of the State of Nevada:

You are hereby notified that you and Nicholas Treweek and J. Leonard Burch, are the owners as tenants in common of the Conkling lode mining claim, patented as U. S. Lot 689, and the Arthur lode mining claim patented as U. S. Lot 690, and in Uinta Mining District, Summit County, Utah. You, said Company, owning an undivided $\frac{1}{4}$, said Burch an undivided $\frac{1}{4}$, and said Treweek an undivided $\frac{1}{2}$, and that you, said company, by underground works owned exclusively by you and not accessible to said Treweek and Burch, or either and to which you refuse them admission, have entered underneath the surface of said mining claims and mined and removed large and valuable quantities of ore belonging to and being a part of said mining claims, and lying and being underneath the surface of said mining claims, and between planes drawn down vertically, to-wit: about ten thousand (10,000) tons of ore of the market value of about forty dollars (\$40.00) per ton, and disposed of the same for about four hundred thousand dollars (\$400,000.00), one-half of which belongs to said Treweek, one-fourth to said Burch, and the remaining one-fourth to you, after first allowing and deducting all reasonable and equitable costs and expenses, of mining and disposing of said ores. Therefore, said Treweek and said Burch, hereby demand an accounting with you, said Company, in the premises.

Very respectfully,

NICHOLAS TREWEEK.
J. LEONARD BURCH."

205

"Salt Lake City, Utah,
January 2nd, 1908.

Messrs. Nicholas Treweek & J. Leonard Burch,
Salt Lake City, Utah.

GENTLEMEN:

Your communication to the Silver King Coalition Mines Company, a corporation organized under the laws of the State of Nevada, of which Company I have the honor to be manager, has been received.

Its contents is somewhat of a surprise to say the least. Of course, you will admit that the Coalition Company is a co-tenant of the ground you mention, and has spent a great deal of money exploring, not only in that, but in other ground, from which it would hold a right to remove sufficient ore had there been any there to pay them back for the money expended before you could set up any claim, I take it.

You asked the right of the Coalition Mines Company to enter into those works made by said Company for the purpose of making a

survey and an examination,—I take it not with the hope of finding any such condition as you state in your letter, but for the purpose of getting a survey and courses, dips and strikes of any veins not only in that but in other ground belonging to the Company, which would be a great detriment to the Company, and enable you to secure knowledge through the expense of others, which does not belong to you in any sense.

The policy of the King Company has always been conservative, they don't care to have their mine surveyed and the maps exhibited on the street for the benefit of promoters, for there is always a class of men seeking this information at the expense of others.

Now, my dear Sirs, on account of conditions the property is mainly shut down until such times as the market for metals improves. Of course, there will be some few men continued for the welfare of the property, and if you are sincere in your statement, and all you require is a map of the opening through or in under the "Conkling" and "Arthur" of which you are a co-owner, I will have Chas. P. Brooks who has been the surveyor for the Coalition Company, and the Silver King and Kearns-Keith almost since their beginning, furnish you with a map, backed up by an affidavit that it is correct for your information; or if you will deposit sufficient money with a Judge of the Court in this City to be named by me, providing you will not take Brooks' affidavit and his maps as correct, I will agree to have this Court name a disinterested surveyor to accompany Mr. Brooks with the necessary help, the report to be made to the court, and a map furnished you of all of the openings and the condition inside the end line of the "Conkling" and "Arthur" mining claims herein mentioned, you paying the expense.

Trusting this is satisfactory, I remain

Very truly yours,

THOMAS KEARNS."

Mr. Critchlow: I also offer in connection with the two letters the answer of Mr. Treweek and Mr. Burch, which is as follows:

"Salt Lake City, Utah,
January 6th, 1908.

Silver King Coalition Mines Company,
Thomas Kearns, General Manager,
Salt Lake City, Utah.

DEAR SIR:

Re Arthur & Conkling Mining Claims.

We respectfully decline the proposition contained in your letter of the 3rd inst., and insist on our original propositions, viz. to survey and examine any and all work in, through, and from the Alliance Tunnel, also accounting for any ores that may have been extracted, shipped and sold from said Arthur and Conkling claims.

Yours very truly,

N. TREWEEK.
J. LEONARD BURCH."

and when work was done, using Brooks' surveys and his notes in conjunction to compile the figures. I do not recall at that time, 1910, of having made any comparison of the amount of ore taken from the Elphinstone stop; no record kept of it so far as I know.

If I remember correctly about all the ore in the Elphinstone was second class; it was a sulphide ore. It was softer than the hardest sulphide ore in the mine.

I have stated that some ore was stored in a drift. That was around Station 1174. I don't recollect ore being stored elsewhere. I don't know that I would recollect, I might have forgotten it. The ore that was stored was dumped in there. We began storing it in October or November, 1906, that is my recollection. I do that at the time the ore was stored because I think that was the time the ore was struck. I don't know how many tons we stored there.

I was instructed to develop the southwest country as rapidly and as quickly as possible. The Kootenai-Kootenai did not own the Belmont ground, and if the Belmont people found out that ore was close to their ground they would seize the mine, and the company was thinking of acquiring all this property to the southwest. We had men in there that we could trust. I think Ted Perkins was in there, Dan McCann and John Foreman. That is all I can recollect with out referring to the pay rolls. Those men were given an extra wage, but I cannot tell you the amount.

The ore was stored there between stations 1174 and 1175 I think, until we found it convenient to take it out to the Silver King shaft. Some of this ore in consequence was taken out through the mouth of the Alliance tunnel. There was some ore taken out of the Alliance tunnel from a stop close to the mouth of the [tunnel].

The connection with the King shaft must have been prior to August 1, 1907, because I took ore over to the King shaft before that time. We took this stored ore out and shipped it about the time of the consolidation of the Company, which was in May, 1907. I do not know that merely upon recollection. I have got this far.

We did take ore out between the time that we discovered ore and the time of the consolidation of the company. We took the ore out of the drift just about at before the time of the consolidation of the company.

I will explain to you how I remember that. When the Kootenai-Kootenai Company was running they got supplies from the King, to an amount of about \$100,000. At the time of the consolidation, Senator Kootenai instructed me to take out enough ore from the Kootenai-Kootenai ground to pay back the debt they owed. I was instructed to take out enough ore within the Kootenai-Kootenai ground to pay that debt back and let them all go in even, not owing each other.

In speaking of the cost of mining I included in that cost any work that was done in the stop, but not the development work leading up to the stop or the drifts, underneath the stop or the raise up to the stop. I wouldn't include them.

The cost of mining wouldn't include any drifts run, much the extensive haulage of the stopes to get out the ore. The cost of mining includes winning from the mine to the mill or smelter.

(Witness, continuing:) After the latter part of 1907, or after the first of January, 1908, I received no instructions to work the ground any differently or dispose of the ore any differently from what I had been doing before. I continued to work in the same manner, except that when the connection was made with the shaft at the 500 we began to keep a record of the ore that was taken out.

207 I do not know how long it was after we struck the ore near station 1856 before we had a full face of ore, but we had it within 30 or 40 feet. I don't know whether we worked continuously after striking the ore for that 30 or 40 feet; I don't remember that; but if we did work continuously we would make 30 or 40 [feet] in eight or ten days. The ore went down two or three feet below the bottom of the drift.

Mr. Hurley and I went to Mr. Brooks one time and discussed with him his sections or map as drawn at that time. We went through the sections with Mr. Brooks and he asked me or Mr. Hurley if they looked about right, in places where he didn't have his surveys connected. Referring to those stopes he would ask "Did that go through straight, or is there a great big sag, or big bump in there or anything?" We would give him our best recollection. I think he had some of the sections made at that time which he showed us. I don't remember whether he changed the sections in response to our information or not. This conference with him about the stopes was about two months ago. Most of the sections that he showed me looked all right to me. I remember one place that he asked me about particularly, whether there was a pillar of waste that was left and wasn't stoped out. He didn't have any survey of it and we discussed it.

I refer now to that which is uncolored, and which lies on Exhibit 2, between the middle section 3 and section 5. I remember telling Mr. Brooks that there was a pillar of waste left in there that wasn't stoped out and taken out. He had spoken about not being able to connect with that. To the best of my recollection the sections which Mr. Brooks showed me were a fair representation of the stopes.

Mr. Hurley was present with me before Mr. Brooks. At that time his sections were not completed, or connected up, in either foot or hanging. He would ask us questions about them; we would give our best recollection, whether it went straight across, and whether there was a pillar of waste or a sag, or whatever the case may be.

The K-K raise was put up to develop that country there in the foot wall of the fissure. It was in the foot wall. We expected to find some ore up there. It was a prospect raise.

I did not assist in making the computation put in evidence by Mr. Brooks of the various quantities excavated from this portion of the Elephant stope in certain years. Have no information from which

any person could ascertain the amount of any given stope
208 which was excavated in any particular year. Don't know of any person other than Mr. Brooks who could give that information. Believe there was some work done in preparing a record on the tonnage taken out of all the stopes in the mine, if I recollect right. There was no record made; it was simply an attempt from my recollection at that time to remember where men were working

The ores which we took out in running from station 1856 on through the K-K drift to the point where we first encountered a full face of ore, were approximately of the same quality and same kind of ore, same value as the other ore, that is, I mean the other ores we afterwards encountered in the Elephant stope.

I am not prepared at this moment to give you the names, Mr. Critchlow, of miners who worked in the Elephant stope from the early part of 1907, until I left.

Mr. Critchlow: I will therefore ask you if you will be good enough to get up those names and give them to me a little later * * * Let me ask you to make that go back as far as October, 1906.

The Witness: If the management of the mine had been so disposed it would not have been impossible to take out the ores from the Elephant stope, keep them pegged and marked separately, and deposited at the sampler and at the mill so they could have been there distinguished. There were three separate bins at the mill and there were four bins at the sampler. All we would have had to do was to run the ores to the Ossian raise, put them in the raise separate from other ores, tram them to the 700, hoist the cars
210 to the surface and keep them separate by pegging them. I had no instructions either to do it or not to do it. During this period Mr. Kearns was there as usual in his visits to the mine. After the Alliance-King cross-cut was finished in 1909 it would have been a great deal easier to keep the ores separate than it was before.

Redir  ct examination of Mr. Dailey:

I was in the Alliance tunnel when it was being driven by Mr. Walden at least twice a week and saw exceedingly difficult ground in there. It was short, broken up, red shale with water in it, running ground, had to be spiled. Sometimes the face would get away from the workmen and the material would run back forty or fifty feet from the face, carried back by the water.

I obeyed the instructions Mr. Kearns gave me about not going into the Belmont ground until later I got other instructions to stope the ore out to the southwest. That was shortly before the consolidation. After the consolidation higher wages to the men ceased. The high wages did not continue after we had the Belmont ground. My understanding was that we did not want the men to talk about the ore because Mr. Kearns wanted to acquire this Belmont ground and didn't want that company to know we had struck ore so near to its lines. If they had that information it would naturally enhance their asking price.

In respects to the visit to Mr. Brooks' office, talking about his section, etc., Mr. Anderson went over there with me, if I remember correctly, and went over the sections with us and Miss Block was there and Mr. Hurley.

There are other stopes in the Silver King Coalition Mines Company's property outside of those here in controversy, that are as

large as these stopes here in controversy, some larger, in which we would break more ore, and the stopes were closer to the shaft.

For a time I was paying men who were working in the Elephant stope higher wages than the usual wage of miners. I don't know whether it was given them at the end of the month or in one check. After the consolidation this did not continue, nor after we started working in the Belmont ground. Mr. Kearns told me he was considering a consolidation of the several companies and also that he did not own the Belmont ground, and that he did not want to drive into it.

211 Recross-examination of Mr. Dailey:

I didn't do any stoping after striking the ore until Mr. Brooks gave us the line. He told me the distance I could run without getting into the Belmont ground, but I don't remember the distance that he stated; but I do remember that I ran close to the Belmont line; I don't know how many days I was in reaching that point.

Redirect examination of Mr. Dailey:

The first shipment of ore sent out from this ground under consideration was through the Ossian raise and out the King 700. It went out the tunnel to the head of the Ossian raise and was dropped down to the 700. No ore from the Elephant stope was ever taken out through the mouth of the Alliance tunnel.

I was given a present in recognition of my services. It was after the consolidation. It was paid me by the Silver King Coalition Company. When the old Kearns-Keith Company was first organized Kearns came to me and they said "You take charge of this mine; when we strike ore we will pay you a salary." The Kearns-Keith mine ran on for about two years; I had struck ore, and the Kearns-Keith mine did not make any money. They never paid me a salary for looking after the Kearns-Keith Company, not a cent, so when they gave me this donation at the time of the consolidation, I understood it was my payment for services rendered to the K-K Company, not for anything I had done quietly, or to try to cover up anything for the company. They gave me \$4,000.00 for the two years' work—four or five thousand, I don't know which. Then when I quit the services of the Silver King Company in 1910, I was given a donation of a thousand dollars.

Don't know how much water was running through the Crescent drift and Alliance tunnel at the time we concluded the cleaning up of the tunnel to the west end of the other. I didn't measure it. The ditch in which it ran was about two feet on an average and the full width of the drift; it rounded in at the bottom, don't believe it was square, it was simply a channel cut in the rock. There was a greater flow of water after we completed the drift than there was before; believe it more than doubled. That water is still conveyed out through the Alliance tunnel. The water going out through the Alliance tunnel was first used to run a blower for ventilation; after

that Park City paid for the use of it; don't remember price they paid per month; Park City Water Works Company was the
212 name of the company, I believe; was a private corporation that furnished water to Park City. We used the water later at the King mill, put in a pumping plant at the mouth of the tunnel and pumped it over the hill. To my knowledge the Silver King Company did not pay the Kearns-Keith Company for that water, took it without paying for it is my best recollection. It was still continued as the water supply for Park City and the increased supply excepting what was used by the King Company was paid for by Park City or by the Park City Water Works Company. It was used as an auxiliary supply to the supply the Silver King had from Shadow lake. That pumping was not discontinued to my knowledge. The water is still in use at the Silver King Coalition, as far as I know. There is quite a lot of water pumped over, don't know how many gallons per day, couldn't give any judgment.

A greater part of this water formerly flowed through the Hanauer tunnel to its mouth, from whence it was sold and delivered to the Park City Water Works Company. In driving the Alliance tunnel we cut the channel through which this water flowed, and it left the Hanauer and came into the Alliance; flowed on through the latter tunnel to its portal and was delivered then from the Alliance tunnel to the Water Works Company, instead of from the Hanauer tunnel as formerly. The Kearns-Keith Company had bought the property in which both tunnels were run, and so become entitled to the revenue realized from the sale of the water to Park City.

C. P. BROOKS, recalled by the defendant testified as follows:

When I went out to establish the line between the Conkling and the Belmont for Mr. Dailey, the work was at a point marked on this exhibit 2, "November 23, 1906." Nothing had been done except a drift in here to the point marked "November 23, 1906." Drift running westerly from 1856 had not been started. Neither that nor the one to the east, the east drift. The McKay cross-cut was completed.

I was not able to fix the line when I was first called out there. I didn't feel satisfied with the surface lines at that time, and I asked Dailey to wait until I could come into the office and go over all the records, when I would be able to determine better the true position of the line. I came in and I got the records from the Surveyor-General's office, and my own office. I calculated and platted
213 up the lines I had found, and found that there had been an error made in the survey for patent of the Conkling mining claim, and that there was a strip in there in the neighborhood of 135 feet.

I had put plugs up in the roof at my first visit, and the next time I went out seems to be June 2, 1907; that is, to this part of the work. I gave Dailey, by letter, I think, the distance to those plugs.

ELWIN S. MAXIM, sworn for the defendant testified:

My name is Elwin S. Maxim. I reside in Park City. I work for the Keystone mine.

I was formerly employed by the Silver King Coalition Mines Company. I haven't worked for it for two years. I worked for them during a portion of 1909, and 1910. I began as station tender in March, 1909. I was sometimes extra station tender too.

My duties as station tender were to do all the hoisting of ore, lowering of timbers, supplies, etc., into the mine; in other words, running the cages. I mean putting the cars of ore on the cage.

I remember the ore bin at the shaft on the 500 foot level. It was about 25 or 30 feet from the shaft. There were various doors in this bin operated by levers, iron doors, and we would place a car in front of this and we would raise the lever and the ore would run into the car. There was a man placed there to load the cars. The first class and the second class ores were distinguished by pegging; shipping ore two pegs stuck in the ore in the car; mill ore one peg, waste no pegs at all. You could readily tell whether the ore was correctly pegged. It was easy to distinguish first class from second class.

There was a tally board at the 500 level. By means of this tally board a record was kept of the number of cars of first class, second class and waste that went up. It was my duty to keep account on the tally board of what went up from each level of the mine. I discharged that duty faithfully and correctly.

Cross-examination of Mr. Maxim.

By Mr. Critchlow:

I have spoken of the manner of pegging ore, two pegs for first class and one for second class. There was also ore marked with three pegs, that was extra first class ore. That went up from some stations or level, but I never saw any three peg ore from the 500 level during the time that I was there.

214 I think the bin for the 500 was completed sometime in July, 1908. I cannot tell you when the station was completed and ore began to rise from the 500. I was there at the beginning of the cutting of the 500 station and all during the building of the bin.

I began to act as station tender at the 500 sometime during the last half of 1908; can't remember the date exactly. I was fired in November, 1908, and I came back to work in February or the first of March 1909, and I went back on the same job I had been fired from. I can tell you the exact date I began to act as station tender in 1908; it was the 7th of January. There was no station there then on the 500. I cannot tell the exact date I started on the 500. I cannot give it any nearer than that it was the last half of 1908.

In keeping my tally I used the tally board; I kept no written memorandum. The ore that I was tallying came from the Alliance side. I was gone from the first of November, 1908, until February, 1909, and it seemed to me, according to my best memory, when I

came back I was hoisting ore there; that is all I can say; that is the best of my memory.

Redirect-examination of Mr. Maxim:

As I was requested to yesterday, I have examined the payrolls and time books to find the dates when I worked as station tender. I will read it from that record: 1908: January 20 days; February 29 days; March 31 days; April 29 days; May 30 days; June 29 days; July 29 days; August 26 days; September 29 days; October 25 days. 1909: February, 1 day; March 2 days; April 8 days; May 25 days; June 20 days; July 26 days; December 2 days.

Recross-examination of Mr. Maxim:

There were two compartments in the ore bins at the 500. I never hoisted any waste other than when the station was cut. From March to June there was no waste at all hoisted that I know of.

WILLIAM BARBEN, sworn for the defendant, testified as follows:

My name is William Barben. I reside in Bellevue, Idaho. I am now a farmer. I run my own farm.

I was employed in 1907, by the Silver King Coalition. I was mining on the King side. I left my employment the last 215 time March 17, 1910. I was employed by the Silver King Coalition, also as a station tender at the 500 level, first on May 20, 1909.

I have examined the payrolls that show at what times I worked there as station tender. I have examined the payrolls during the last week. As station tender I attended the putting of the cars on the cage on every level in the mine. Starting in May, 1909, I continued as station tender until March 17, 1910. I worked nearly every day during that time.

(At this point Mr. Dailey produced the payroll for May 1909, to exhibit to the witness.)

(Witness, continuing:) Examining the payroll I see that I worked ten days as station tender in May, 1909. I had to sign this payroll before I could get my check.

(Plaintiff's counsel here suggested that the witness go over the payroll and make a memorandum of the days that he worked as station tender, which was assented to.)

(Witness, continuing:) There was an ore bin at the 500 level. I didn't load from the ore bin; another man did. We designated first class by two pegs and second class by one peg, and waste by no peg. That was the system throughout the mine, as well as at the 500, but you could distinguish first class from second class by the eye very readily.

There was a tally board at the shaft of the 500. It was my duty by putting pegs in the holes in the tally board to indicate the num-

ber of cars that went up from the 500 level. The hole in which I placed a peg indicated whether the car was first class, second class or waste. The first row was for first class, the second row was for second class, the bottom row was for waste. I performed that duty of pegging the cars correctly all the time I was there. I had no motive to do anything else.

I pegged the cars as each cage load went up.

(It was agreed here that when the witness made up his memorandum of each day that he worked as station tender during the time mentioned, a representative of the plaintiff company should be present with him to examine the payrolls.)

(Witness, continuing:) I have examined the payrolls and books when I was station tender, and the record is as follows:

1909: May 12 shifts; June 29 shifts; July 28 shifts; August 31 shifts; September 29; October 31; November 28; December 216 28, 1910: January 30 shifts; February 25 shifts; March 17 shifts.

I began to tend station at the 500 on May 20, 1909; ore was coming to the 500 from the Alliance tunnel, Alliance side, don't know from what part of the workings; don't know the particular ground it was being taken from. My duty did not call me over to the tunnel. Had two bins there, but cannot estimate their capacity. Worked one shift a day, we each changed around every two weeks. A fellow by the name of Roach loaded the cars; he would put the pegs in them as he put the cars on the track; I had nothing to do with putting the pegs in the ore at all; didn't have to make any examination to see whether they were rightly pegged, I just recorded whatever pegging he had done upon the tally sheet. Should judge it was between thirty and thirty-five feet from the ore bin to the shaft, never measured it. I tended to all of the stations. At different times we had about eight or ten cars to take care of Station 5. When I would get a call from No. 5, I would find that he had let the ore into the cars, pegged it and put it up on the switch where we carried loaded cars. I would then stop the cage, put the cars on, record the pegging and go on up. They were hoisting ore from five levels while I worked there. Five was the one we was hoisting off of; we had five, seven, nine, eleven and thirteen. The other station tenders while I was there were Bert Mahoney and George Prudence. I think they worked there during all the period I did, from May 20, 1909 to March 17, 1910. Don't remember Mr. Maxim being there during that period.

GEORGE PRUDENCE, sworn for the defendant, testified as follows:

My name is George Prudence. I live in Park City. I work at the Daly-Judge Smelter.

I worked for the Coalition Company as a station tender. I don't remember the first time; I was on stations there three different times.

I can tell by the payroll easy enough when I was tending station. I remember that when I was tending station we would peg the ore to designate first class and second class. I would keep a record on the tally board by means of the pegs in the holes, of the cars sent up, first, second and third class. The station tender had to receive everything that came down, send everything up that went up and ride the cage from bottom to top. I was careful to designate by means of the tally board every car that went up and what it was.

217 I did it to the best of my ability, and did it correctly. * * *

I have examined the books now since I was on the stand yesterday, and I have a memorandum taken from them showing the times that I served as station tender. I examined the books in the presence of Mr. Taylor, one of the plaintiff's witnesses yesterday afternoon. My memorandum is as follows:

For 1908: January 31 days; February 29 days; March 31 days; April 30 days; May 30 days; June 25 days, July 4 days.

In 1909: February 8 shifts; March 30¼ shifts; April 28 shifts; May 31 shifts; June 3 shifts.

Cross-examination of Mr. Prudence:

I don't remember when they first did take ore up through the 500; but if I am not mistaken it was somewhere along in 1909. I was working there when they were cutting the station at the 500. They were hoisting waste from the station up to the main shaft.

Why yes, after the connection was made through the cut off drift to the shaft at the 500, they hoisted quite a considerable amount of waste there; I mean after the connection was made and they commenced to hoist ore; we hoisted a car of waste occasionally at different times, got it cleaned up around the station.

Redirect examination of Mr. Prudence:

I have no distinct recollection as to taking up waste on any particular occasions after the connection was made; some was covered up around the station, yes; I have no recollection as to whether any other waste was sent up or not.

GEORGE MCCARRELL, sworn for the defendant, testified as follows:

My name is George McCarrell; I am 32 years of age; I am a miner and am working for the defendant Company. I have worked for the defendant off and on since 1907. I was in the Alliance in 1912. I was working for George Blood.

I was station tender at one time. I pegged ore from the 500 level station. The cars were pegged. There was a bin at the 500, two compartment bin, one on each side, for first class and for second class. You would tell from the appearance of the ore what was mill ore and what was first class, as well as from the manner in which

218 it was pegged. When I loaded cars on the cage I immediately pegged the tally board, recording the number of first and second class and waste that was sent up. I did that all the time and did it correctly.

Cross-examination of Mr. McCarrell:

I had no tender or helper on the 500; all the ore I took out of the bins I pegged. There were compartments to the bin, one for first class and second class. I do not think there was any waste put out. I had nothing to do with putting the ore in the bin. What I took from the first class bin I pegged as first class and what I took from the second class bin I pegged as second class. * * *

Since I [have] my other testimony yesterday I have examined the payroll with Mr. Taylor and Mr. Dailey. The memorandum taken from it shows that I commenced in 1910; February 3 shifts; March 14 shifts; April 18½ shifts; May 2 shifts, August 1 shift.

JOHN McCLEAN, sworn for the defendant, testified as follows:

My full name is John McClean. I live in Park City. I have been a miner for about eleven years.

I was first employed by the Silver King Coalition Mines Company in 1907. I left the Company's employment in April, 1911; but I am working there again now.

I worked as station tender. I will examine the payrolls and give you the dates later. As station tender I sent ore from every level of the mine, including the 500. All the ore sent from the 500 was taken from an ore bin near the shaft. The greater part of the time I worked there I had to load the ore out of the bin into the cars myself. The ore was pegged by me, first class two pegs, second class one peg, waste, no peg. Having loaded the cars I put them on the cage, and I tallied on the tally board what I sent up. I tallied first class as first class, second class as second class and waste as waste. There were rows of holes for first class, second class and waste.

I wasn't very careful, no; I pegged up ore that never went up the shaft. Lots of ore recorded on the tally board that never went up. In order to make it look good for the shift, I would tally on the tally board more than I sent up. That was done to make it look good for that shift. Sure, so that the foreman would think the men

219 were doing good work. Nobody told us to do that; we just did it among ourselves; we, the station tenders and the top car men.

Q. Is that true of both classes of ore, first and second?

A. Well, it was only on the 500; we had to load it ourselves. We never did indicate on the tally board a less number of cars than went

Cross-examination of Mr. McClean:

I don't remember how long I was station tender at the 500. I was on and off. When somebody would lay off, I would be there. I was a relief man. I was not long on the 500.

I don't remember any first class sent up from the 500, not that I can remember in my time; I don't remember any waste either. My recollection is it was all second class.

The shift boss is supposed to take the record off the tally board

when he goes off shift. All I did was to tally on the board and leave the tally there. I understood the shift boss would make a record of the showing on the board.

The station tender on the shift before me I think was Bart Mahoney. If I found the station man's pegs just ahead of me up to forty or fifty, I would move them back to zero to start my shift.

Redirect examination of Mr. McClean:

The shift would generally move the pegs back; but sometimes they might leave them sticking in there, you see. When the shift boss would be going off shift he would take the tally off the board, and he might happen to leave the pegs sticking there. The rule was for the shift boss to take the tally off the tally board when he went off shift. The shift boss would usually pull the pegs out and stick them in the holes that were for them. That is what he usually did so far as my observation goes. • • •

Since I was on the stand yesterday, I have gone over the time-books or payrolls in the presence of Mr. Taylor and Mr. Dailey, and I have made a memorandum of what the payroll shows as to the time I worked as a station tender on the King 500. It is this: 1909: November 3 days; 1910: January 11 days; February 1 day; March, none; April 1 day; May none; June none; July none; August 27½ shifts; September 27 shifts; October 31 shifts; November 28½ shifts; December 22 shifts.

220 EMIL BJORK, sworn for the defendant, testified as follows:

I live in Butte, Montana now. I was employed as a station tender by the defendant. I was so employed more than once; once in 1906, once in 1909. I left the 19th of May, 1909, as near as I can remember, and then I was back there again after that as station tender for four months in 1910.

I have examined the payrolls of the defendant Company, and taken a memorandum from them which shows that I acted as station tender as follows:

In 1909: January 31 days; February 27 days; March 31 days; April 29 days; May 19 days. 1910: April 17 days; May 31 days; June 29 days; July 30 days; August 19 days; March (1910) 2 days. The payroll is signed by me.

I loaded ore out of the ore bin on the 500 myself; sometimes I had a loader, if they had a spare man to give me. Most of the time I loaded myself. I don't remember how many compartments the bin had; it is a long time since I have been there. I know I would peg the ore, I think two pegs in the first class and one peg in the second class, and when I ran the cars on to the cage I would tally them correctly on the tally board; that is, I would put the pegs in the proper holes to show what went up on the shift. I did that every day, and did it correctly.

Cross-examination of Mr. Bjork.

At the start of the shift if we found pegs in any recording holes we took them out and put them in the dead holes to start over again so that we could properly tally up the cars that we hoisted on each shift.

Recross-examination of Mr. Bjork.

I can't give you the shifts that I worked as station tender prior to 1909. I went through the books yesterday and identified those for the years 1908, but I don't remember them; I didn't put them down.

(Hereupon Mr. Ray, by consent, read the following into the record as having been taken from the books—witness' time as station tender in 1908):

1908: January 31 shifts; February 29 shifts; March 29 shifts; April 30 shifts; May 30 shifts; June 30 shifts; July 26 shifts; August 31 shifts; September 30 shifts; October 31 shifts; November 30 shifts; December 26 shifts.

221 I was there as station tender practically all of the year 1908.

I can't tell you when the station at the 500 was completed. I have no memory upon that subject. As to whether I hoisted my waste after the station was completed, at the 500, I have no recollection on this subject at all. I remember two kinds of ore; I didn't do any sorting of the ore; there were two chutes in the bin, of course, one for first class and one for second class. I don't remember loading any waste on the 500. I can't remember whether I did or not; I can't remember because it is a long time since then; I can't remember about that.

JOHN FORSMAN, a witness sworn for the defendant testified as follows:

My name is John Forsman. I live in Park City. I am working for the Silver King as hoisting engineer. I have acted as station tender. I was station tender from some date in February until May 5, 1909. I also was station tender after that date again.

I have examined the payroll with Mr. Taylor and Mr. Dailey, and I find that I worked as station tender on the 500 in 1909, as follows: February 2 days; March 25 days; April 23 days; May 5 days.

I loaded ore from the bin into the cars myself, some of the time, and some of the time I had a helper. The first class ore I pegged with two pegs, second class with one peg. That was the custom throughout the whole mine wherever the ore came from. When I put the cars on the cage I tallied them on the tally board as first or second class by putting the pegs in the proper holes.

Cross-examination of Mr. Forsman:

That bin on the 500 was used mostly for second class. I don't remember ever seeing any first class come off there, off the 500; but

the record would show whether there was or not. I don't remember any waste coming off there either.

When I was station tender I would always start the pegs at zero when they were not already there. If they were not already there I would set them there, but most of the times they were in the dead holes when I went on shift. When they were not I would move them to the dead holes. The top car man kept a record too, 222 but his record, of course, did not show from what level the cars came. They were commingled at the top and sent to the samplers and to the mill.

(Hereupon it was stipulated between the parties as follows):

Mr. Marionaux: It has been stipulated between the parties, if your Honor please, that the cost of the permanent improvements as given in our account is correct—without conceding the materiality or relevancy of the fact, * * * and that the cost of tramming, that is to say, the cost of loading concentrates at the mill, and ore at the sampler on to the aerial tram and the transportation and unloading at the railroad, into cars, is twenty cents per ton.

Next, that the cost per ton of milling crude ore per ton, of crude, was \$1.10 per ton.

Next, that the ratio of concentration at the mill throughout the entire period involved in this case, was \$2.87½ tons into one.

Next, that the cost of sampling was 22.1 cents per ton.

M. J. DAILEY, recalled testified as follows:

I spoke yesterday of a man by the name of Tim F. Sullivan, who was station tender, I think, in 1910. I think I gave as his time as station tender, 27 days in February; 29 in March; 12 in April, 1910. I haven't got the record with me now; but I stated it correctly yesterday. I have made every effort to ascertain the whereabouts of Mr. Sullivan by inquiring of different employes of the King, with whom he was acquainted, and I have had the Assistant Secretary inquire all around Park City, and I found that he is not in Park City, but that he has left there and gone no one knows where.

Cross-examination of Mr. Dailey:

Tim F. Sullivan worked as station tender and in no other capacity. I have given you the names of all the station tenders that worked for the King Company during that period. I remember them very well, except there may be a man worked there a day or two that I may have overlooked, but not any I think that worked to exceed a week.

I have attempted to give you in my testimony the names of those only who were station tenders between the first of April, 1909, 223 and the time I left the Company. That is what I was asked to do. What I was seeking to cover was the time we were hoisting the ore from the 500 level, beginning in April, 1909, and ending June 1, 1910. I begin with April 1, 1909, because that is the first time we took ore out of the 500 level. I know that by the

records kept at the mine. The records are right here in the court room. They are the shift boss' record.

(Hereupon it was admitted by plaintiffs' counsel that due diligence had been used to find Tim F. Sullivan.)

CORNELIUS J. O'NEILL, sworn for the defendant, testified as follows:

My name is Cornelius J. O'Neill. I live in Park City and am employed by the defendant Company as a foreman. I was shift boss from June, 1909, to August, 1910, I think. There were two other shift bosses on the King side at that time, John Lahey was one and Oliver Allen was the other. Now both are dead. I remember also that a man named Lloyd was shift boss, but I don't know on which side. Lahey died about 1910 or 1911.

My duties as shift boss were to look after the ore and after the men, and to make a record of the cars that came out of the mine on my shift. It was my duty to keep such a record of the cars from every level of the mine while I was on shift, and I kept such a record. I have the books here in court. The last thing I did before coming off shift was to write down in the book the amount of ore that came off these different levels. There was a tally board upon which the account was kept, by pegs, so that if the tally board was correctly pegged it would show what went up on the shift. I used to take the record sometimes practically from the tally board, and sometimes the station tender would read the tally board and give me the result, and I would record it in the shift boss book.

There was also a tally board at the top of the shaft, a board with holes and pegs. The tally board at the top of the shaft should show the total number of cars that came up from the various levels, but the sum of the cars that went up as I got the same from the respective levels did not always correspond with the sum shown by the record on top, but the shift bosses would record in the book the result of their record at the respective levels. The variation [between] the sum of the cars sent up from the different levels as taken by the shift boss and as recorded at the top might have resulted from a mistake. It was pretty hard to tell how it happened, but I don't remember when there was a discrepancy of more than a few cars.

I am looking at the book that you handed me, on the cover of which is written in pencil "July, 1909," and printed "Silver King Coalition Mines Company, memorandum of ore extraction month of July, 1909, — — —, Foreman." And pasted on it "July, 1909." That is one of the books in which I made a memorandum of the number of cars sent up from the various levels. I have examined this and all the other books down to and including July, 1910, so as to be able to say on what shifts the figures are made by me. The ore from the Alliance side came from the 500, marked in the book.

Under the head "level" there are the figures 5, 7, 8, 11, 13 top.

That indicates the various levels we were working. The number 5 level means the Alliance; that is, the workings in question in this case. The number of the shift is shown as No. 1 shift, No. 2 shift, No. 3 shift. "1st" indicates first class; "2nd" indicates second class; "waste" indicates waste, and there is given the total for each shift. * * *

Referring to the book that I was being interrogated about yesterday, the entries that I made in that book I made correctly, and according to the tally board, except upon some rare occasions the station tender would tell me what the tally board showed. The 500 was the higher level, so that when I got to the 500 I would go up the shaft.

On July 1, 1909, I was on No. 1 shift. 18 cars went up from the Alliance (500) that day, no first class. On July 2, I was on No. 1 shift. The book shows that on that day there went up from the 500, 10 cars of second class and 2 cars of waste, and no first class.

Mr. Critchlow: It would seem to me that a statement might be made up and submitted to us with the books so that we can save time by looking into it.

The witness (continuing) identified too the entries made in the shift boss' books by him after the company commenced to keep a record of the cars sent up from the 500 level, by means of the tally boards and the shift boss' books. The shift boss' books have been introduced in evidence for the purpose of showing the number of cars of first class, second class and waste raised from the 500 feet level, stopes in controversy in this case, from the time the
225 connection was made from the stopes through the cut off drift on the 500 direct to the shaft, to the end of the accounting period.

Cross-examination of Mr. O'Neill:

I first worked for the Silver King or the Kearns-Keith in 1903 or 1904. The next time in June, 1907. I was 27 years old then. I have mined in Leadville, Colorado. Between my first employment with the King and my employment in June, 1907, I went to Goldfield, Nevada, and worked there a short time as a miner, and then returned to Park City and went to work for the Little Bell and the Silver King Consolidated. I was foreman at the Silver King Consolidated for a couple of weeks. I don't remember when we began cutting the station at the 500; but I think it was sometime in the spring of 1908. I can't give you the date, I don't pay any attention to that, and it is too long ago. I could not tell you how long after the station was completed that the connection was made through. I couldn't make a close guess about it; I would like to, but I can't.

Other shift bosses on the King side while I was there were Dan Lahay and William Tuggle, also J. C. Schrinner; Harry Dudley; Herman Anderson; Andrew Ollus; J. H. McNelis; Ben Lloyd; John Hart. There was William Porter also and James Meehan; John Shay; Frank Touzel; Pat Greenan; Tom Cunningham; I don't remember any more.

The Silver King workings are very extensive. I don't know whether they extend a half a mile north and south, or whether they extend a mile and a half east and west. There were different levels from the 5 to the 1300, and many different workings on each level; a great many stopes. A shift is eight hours; the first one begins at seven o'clock in the morning, ends at three in the afternoon.

My business was to go around to each one of the stopes every shift and see the men. If I was on 700 level at quitting time I would go right up to the surface. Sometimes if I was on the 700 level at quitting time, I would go down to the 1300 level to get the tally; not always, sometimes I missed it. Very seldom that I missed it. Got the tally every time I went on the level; when I went to the 13th, I got the tally myself; I made a note of the amount of dirt that was hoisted. If it was just one level I could probably keep it in my head. If the station tender didn't know the tally and I was on the 700-foot level, I would generally have them let me down to the 13th to get the tally. I did it more often than I omitted. I wouldn't

226 go alone for that purpose, there was several purposes, I wanted to see if the shift was coming out too early, or wanted to see if any dirt was left on the station; find out if any timbers down there. Sometimes I made a mental note of the tally and sometimes I put it down. I knew generally what came out of those levels; then I would go and see if they gave me the correct run. I made a practice of putting it down in writing in a [s-ratch] tab in my pocket; kept a pencil for that purpose. Didn't always do it, missed it sometimes. The record was as close as I could get it possibly; it was absolutely close, not absolutely correct all the time.

While I was shift boss in 1909, and after the connection had been made on the 500 level, there went up from that level first class, second class and waste. The waste came from the workings on the 500 level; I don't know just what part of the workings, but lots of waste went up from that level.

I didn't hear the men testify yesterday that they never hoisted any waste from the 500 level; I wasn't here. If they said there wasn't any waste I wouldn't think I was mistaken about it. I know the waste came through the cut-off drift that led to the 500 station.

I wasn't a shift boss over on the Alliance side. There was a place where the waste could be stored on the 500 level, the bin had only two compartments, but we would clean out the ore from one of the compartments when we were taking waste. We would clean out the ore and dump the waste into those bins. When we were doing that we would not send any ore through that bin. I think the connection was made with the shaft when I began to be shift boss in June 1909, and they brought a lot of waste through there after that during 1909. If the waste came from the 500 at all it could not come from anywhere else, except the Alliance side. I am positive that what is marked in these books as waste was not first class ore. First class ore was never marked down as waste—not to my knowledge. I don't think I was ever over in the Elephant stope while I was shift boss. These books that have been shown to me this morning containing records from the early part of 1909, and up to 1910, are the original

books. The shift bosses and the foreman and the superintendent have access to them.

Redirect examination of Mr. O'Neill:

No matter what shift I was working on my shift was always known as No. 1 shift.

227 BART MAHONEY, sworn for the defendant testified as follows:

My full name is Bart Mahoney. I am thirty-seven years old, and live in Park City. I am a miner by occupation. I am employed now at Alta.

The first time I worked for the Silver King was in 1904. I worked on the Alliance side in 1915. I worked on the Silver King side starting in July, 1908, and I quit in August, 1910. I was station tender on the King side, beginning June 20, 1909.

I have examined the pay rolls, and I find I was employed as station tender in 1909 and 1910, as follows:

1909: June 10 shifts; July 26 shifts; August 31 shifts; September 29 shifts; October 31 shifts; November 30 shifts; December 27 shifts.

1910: January 25 shifts; February 27 shifts; March 31 shifts; April 30 shifts; May 27 shifts; June 29 shifts; July 27 shifts; August 7 shifts.

My duties as station tender included keeping a tally of the cars we hoisted. At the ore bins on the 500 there was a man to load the cars, but sometimes I helped him. First class was pegged with two pegs; second class with one peg; but you could tell readily what was first class and what was second class by looking at it. As I would send the cars up the cage I would peg the tally boards properly. I did that all the time and did it correctly.

Ceased to work for the King the latter part of August, 1910, I believe. I was working in a gassy place when I quit. Prior to that time I was not discharged that I remember of. After that time I was discharged; I took a layoff one time for two weeks; when I came back they told me there was nothing doing. I talked with Tom Kearns as to why there was nothing doing. I heard I was black-balled; was accused of giving some information to the Conkling Company. I told that to Mr. Kearns and he told me he didn't think I had anything to do with it; [rhat] I could go back to work any time. I didn't go back then, but did after. The incline on the 500 was right at the back of the last chute, at the end of the ore bin. The waste I hoisted came from the little incline; after the incline was completed there was no waste sent down. Sometimes when I went on shift the pegs were in the dead holes, and sometimes they were not.

228 The next day the witness was recalled by plaintiff for further cross-examination and testified as follows:

I made no record of the ores hoisted from the 500 except by the tally board. I made no record in my book. I remember a specified number of cars hoisted on a certain date between June 20, 1909 and August 31, 1910, on one shift. I remember that fifty-seven cars were hoisted on one shift. I remember it, because we were trying to get a big tally that night, and that we hoisted fifty-seven cars off of the 500 that night. As a rule we always hoisted an even number of cars because we sent up two cars at a time. On that night I took up fifty-seven cars, an odd number, because there was a man came over from the Alliance named Jack Mills, who wanted to go on top, and I took him up and had fifty-seven cars on that shift. That accounts for the odd number. I hoisted on this shift first class and second class ore. I don't remember how much first, but as near as I can remember I thought it was 22 cars first class and 35 cars second class. I couldn't swear to that. I do know there were both classes of ore, first and second. That is the highest number of cars I hoisted from No. 5 level on one shift. That was my record.

I worked in No. 2 of the K-K incline. This would be down from the Hanauer winze. It would be No. 2 level coming down the K-K incline on Exhibit 4 from the Hanauer tunnel, and breaking into the Columbia raise. I recall making a connection through to Columbia raise and removed some ore. I should think about 200 cars, but I wouldn't swear to the number of cars. This ore was hoisted up the incline from K-K No. 2 marked on Exhibit 4, and taken out the Hanauer tunnel. I kept no track of it because I was told not to by Mr. Blood. I put it on the dump along by the side of the track. It was first and second class ore. I had charge of the two shifts there, and all the ore that was removed was under my direction. I hoisted up to the Hanauer level and took it out and dumped it along the tracks. I worked in the Receiver's stope in August, 1914, on ore. There was first class ore in there. I don't remember how many cars of first class per shift we removed from the Receiver's stope. Only worked there about two weeks,—something like that. Was never skinner on the Alliance side. I did work as a skinner bringing my ores in through the 700 from the Alliance side. I believe it was 1908. My boss was Ben Lloyd. I happened to work as a skinner because the regular skinner was laying off, and I was told to work in his place. I made six trips on the shift of 8 cars, making a total, of 48 cars. It was mixed ore, first class and second class. There was no waste. That ore was hoisted up the King shaft. It came down what we called the Alliance chutes, and was hoisted from the 700. It was sometime between July, 1908, when I started working at the King, and the first of the year.

I worked in the 600 stope in Jim Toole's time. When I acted as skinner I took it out of what we call the Alliance chutes, and pulled it out on the 700 level to the King shaft.

Redirect:

This was sometime in 1908. I couldn't fix the date any more definitely, but I didn't start to work until July, and it was some-

time between July and the first of the year. As near as I know all of the ore that went from the Alliance from June, 1908, until the first of the next year went out the 700 level to the King shaft. I made six trips, but made no memoranda of it. I had 8 cars to each trip, I didn't write it down anywhere, I just remember it. Am testifying from unaided recollection. Do not remember what day it was I hoisted 57 cars of ore, but it was sometime before I quit the station, in August, 1910. I was tending station between June 20, 1909, and August 6, 1910. There were 57 cars went up on my shift. It was afternoon shift, three o'clock I tallied up the cars and had no further concern about it. What fixed it in my memory is that the day shift made a big run, and we were on three o'clock shift, and we tried to beat the run the day shift made. That is why I remember about these 57 cars. At that time we never got that many cars before in a shift. At all times each shift was trying to make as good a record as the other shifts. The only way I remember it is because I tried to make a big tally on this shift. It was the shift bosses that were trying to make a good record. All we had to do was to tally, and when we had tallied we had completed our duty. Jack Mills was in a hurry to get up on top, and I wanted to hoist the rock and we had a few words, but didn't amount to nothing. I had more than one car to go up when he was there, but took only one because he wanted to go up. He was on the top deck. I put a car on the bottom deck. I don't know just what Mills said, but he wanted to go on top. I told him I was too busy, he better stay away, that is all. There were 218 cars hoisted in that shift from the different levels on the day when 57 cars went up from the 500. I don't remember how many cars went up from the 500 any other day. I just remember this certain night,—I just remember this night I made the big run. I don't know how many cars of first class went up with the 57, but as near as I can remember 22 first class and 35 second class. I made
230 no note of it. I can't swear to that, as I said before. I might be mistaken about it. I can't tell what the next biggest record I had from the 500 on my shift was. I never paid any attention only to this certain night we made the big run. That is the only way I remember. That was the biggest run I ever made from the 500. I have no idea what the next biggest run was. On the other shifts while I was employed there sometimes I would hoist from 2 to 14 cars of first class and probably 2 to 30 or 40 of second class. Excepting on this one night of which I told you. I can't remember any more. I remember telling Mr. Ray about this. He asked me who came over there and how I happened to have the odd car. I always had an even number of cars. If thirteen cars came out there at the shaft ready to be hoisted on my shift only 12 would go up. I would leave one for the next time, because I put one on each deck of the cage. I wouldn't send up the cage with one car. The shift bosses never asked me to send up one car. I knew that I worked in what was the Hanauer incline. I do not recognize the working, K-K Level No. 2. I do recognize the Columbia raise. The map is something new to me. I got the ore in this drift where we made con-

nection with the Columbia raise on the bottom of the incline at the second level. I started out from the second level. I can't tell you whether it was the bottom of the incline or not. The ore I took out was about 50 feet between the bottom of the incline and the Columbia raise,—about 50 feet from the bottom towards the Columbia raise.

Mr. Blood told me to take the ore and dump it along the track in the dump. I asked him if I should keep track of it. He told me to leave it go, and keep no tally of it.

BENJAMIN LLOYD, sworn for the defendant testified as follows:

My full name is Benjamin Lloyd. I am now working in the mines at Rock Springs, Wyoming. I have been a miner all my life. I have been mining for eight years in Park City.

I worked for the King Company, in 1902, until along in August, 1910. I haven't worked for the Company since.

I was shift boss a portion of 1909 and 1910. I commenced in May, 1907. I was shift boss then until the first of January, 1908, when the shut down came. I think they put on full force again in June of that year. Then I continued as shift boss in August, 1910.

I think the connection was made on the 500 level between the Alliance side and the Silver King shaft along in 1909. What time in 1909, I don't remember. Dan Lahey was a shift boss on the King side; also Charles Mair and Con O'Neil. Mair was there when I left.

O'Neil and Lahey and myself used the same books to enter the amount of ore that was sent up. The last thing I did before coming off shift generally was to note down on the book the number of cars of each kind of material that had been sent up on the shift. I did that every day. I don't believe I missed once. I would first write down the record in a little memorandum book I kept there in my pocket, and from this I would put it in the company's book. I would get my information from the tally boards. After taking the record from the tally board I would put the pegs back to the zero holes. I don't think I ever failed to do that.

(The witness was here handed a book labeled "October, 1908, December, 1908, February, 1909, April, 1909, June, 1909.")

(Witness, continuing:) Turning to April, 1909, there are columns, you will see, for first class, second class, waste, and the shifts are also indicated, and the levels and the top. I have put a check mark opposite each shift that I worked.

The witness here read from the book the number of cars of first class, second class and waste that went up from the 500 as recorded in the book by him.

The ore extraction books for April, May, June, July, August, September, October, November and December, 1909, were shown to the witness, and from these books he read into the record the cars of first class, second class and waste sent out from the 500 level as recorded by him in these books. The first ore I have recorded that

went out from the 500 in the month of April, 1909, was on the 29th of that month.

(Witness resuming his testimony on the following day, testified:)

I have ascertained since yesterday that Mr. Mair was not a shift boss there during the time that Mr. Dailey worked at the mine.

Referring to the ore extraction records for April, 1909, I identify the figures. Nothing went up from the 500 level on the 232 first of April, 1909; nothing went out on the second or the third; nothing on the fourth of April; nothing on the fifth of April or the sixth of April. On the seventh 14 cars of waste only went out.

The figures on April 8th are those of Mr. Lahey. The books show that on that day there went up 18 cars of waste only; on the 9th (these are Mr. Lahey's figures), there went up 16 cars of waste, only from the 500 level, on the 10th, 15 cars of waste only; on the 11th, 12 cars of waste only; on the 12th I cannot identify the figures; on the 13th 4 cars of waste only. I identify the figures on the 14th of April; nothing was sent up from these stopes on that day. On the 15th I identify the figures. It shows that there went up 12 cars of waste only. On the 16th I identify the figures, there went up 12 cars of waste only. On the 17th I identify the figures; there went up 8 cars of waste only; on the 18th I identify the figures; there went up 8 cars of waste only. I identify the figures on the 19th. There went up 18 cars of waste only. I do not identify the figures on the 20th. I identify the figures on the 21st. These are Lahey's figures. There went up 16 cars of waste only. I identify the figures on the 22nd. There went up nothing at all. I identify the figures on the 23rd. There went up 14 cars of waste only. I identify the figures on the 24th, there went up 50 cars of waste only. I identify the figures on the 25th; there went up 24 cars of waste only. I identify the figures on the 26th. There went up 36 cars of waste only. I identify Lahey's figures on the 27th. There went up 22 cars of waste only. I identify them on the 28th. There went up 44 cars of waste only.

(Witness continuing, proceeded through the ore extraction books, identifying the figures made by Lahey on his shift, and stating for the record the cars sent out from the 500 level according to the record kept by Lahey, during May 1909, June 1909, July 1909, August 1909, September 1909, October 1909, November 1909, December 1909, January 1910, February 1910, March 1910, April 1910, May 1910, June 1910.)

I was shift boss at one time on the Alliance, I think it was in 1907. I did not work there after the first of January, 1908, that is, on the Alliance side. I remember something about the character of the ore we had on the Alliance side there while I was shift boss that short time. We had some ore in cross-cuts, that looked pretty good there; some of it did not look so good. I mean some ore that was stored in the cross cut when I first went there. The ore in the stope on the Alliance side while I was there, if I remember right, was mostly second class.

233 Cross-examination of Mr. Lloyd:

If I remember correctly, it was about the middle of May, somewhere around May 1907, that I was shift boss on the Alliance side. Andrew Hurley was one of the shift bosses at that time. I do not know who the other one was. I was shift boss there on the Alliance side in 1907, and I think it was in May. Stoping then was being done in the Elephant stope; that was the only stope that was open when I was there. While I was there, it was pretty nearly all second class.

I have spoken about some ore being stored in a drift, some of which was first class and some of it second class. It was stored in bulk, but they had to load it in cars to take it out, and I saw it when it was being taken out. I think some of it was stored near the stope and some of it was stored at some considerable distance near the stope. I remained shift boss on the Alliance side until January, 1908, I think about six months; I am not certain about the length of time.

They began to move the ore through the Kneal drift and through the 700 to the King shaft about the time I went over there, on the Alliance side, somewhere along about that time, I can't tell the exact day. I did not keep any track of the ore that went through the Kneal drift down to the 700 Kneal shaft. I don't think we had any tally boards there in 1907, but the ore was pegged as first or second class in the cars. The men were supposed to know first class from second class themselves. If they did not know I would tell them.

The ore that came from this blue part of the Elephant stope while I was there in 1907, the main part was second class. The men pegged it first class or second class according to what it was.

I am sure that Dan Lahey was shift boss there in 1909, because he used to come off shift right ahead of me. I used to see him every night; I relieved him. I think he was there in April, 1909, might have been March, I can't be sure about the date.

I put a cross opposite any figures in the book that I felt satisfied were Lahey's figures. I got well acquainted with his figures while he was shift boss. When I am in doubt about the figure being his I put no cross opposite it. I used to see Lahey's figures every night when he came off shift. He made the best figures of any of us there. I would examine his figures every night when he came off shift to see how much work that shift had done, so I could try to keep up with them.

234 JAMES TOOLE, sworn for the defendant testified as follows:

I reside in Salt Lake City. I have been mining for about nineteen years, some of the time in Park City.

I was first employed by the defendant Company July 7, 1913, and remained continuously in its employ until December 31, 1914. I haven't worked for them since. From January 6, 1914, until December 31, 1914, I was foreman at the Alliance.

I can give you the names of all the motormen who were employed

during the time that I was foreman underground, and the time when they severally went there.

1914: January, Mat Salmi, 30 days.

Ed Johnson, 30 days.

Pat Meaney, 30 days.

February, 1914:

Pat Meaney, 28 days.

Frank Hill, 5 days.

Ed Johnson, 29 days.

Mat Salmi, 23 days.

March, 1914:

Pat Meaney, 29¼ days.

Emil Bjork, 25 days.

Frank Hill, 32 days; (one day overtime).

Ed Johnson, 29 days.

April, 1914:

Emil Bjork, 33 days; (3 days overtime); Charles Ely, 30 days; Frank Hill, 30 days; Ed Johnson [310¼] days.

May, 1914: Charles Ely, 31½ days; Frank Hill, 30 days; Ed Johnson, 30 days; Pat Meaney, 30 days.

June, 1914: Charles Ely, 25 days; Ed Johnson, 28 days; Pat Meaney, 29 days; Frank Hill, 29½ days.

July, 1914: Charles Ely, 23½ days; Frank Hill, 30¾ days; Ed Johnson, 29 days; Lee Johnson, 11 days; Pat Meaney 31½ days.

235 Mr. Critchlow: I would like to inquire generally the materiality of this testimony.

Mr. Dickson: It is one link in the chain of evidence showing the number of cars of different kinds of ore that came out of the Elephant stope in 1914.

(Witness, continuing:) August, 1914: Frank Hill, 30 days; Lee Johnson, 29 days; Pat Meaney, 31½ days; Mat Salmi, 28 days; September, 1914: Frank Hill, 29 days; Lee Johnson, 12 days; Pat Meaney, 28 days; Pat Salmi, 29 days; Pat Durkin, 17 days.

October, 1914: Pat Durkin, 33 days; Frank Hill, 31 days; Pat Meaney, 19 days; Roy Sanger, 31 days; Mat Salmi, 31 days.

November, 1914: Frank Hill, 30½ days; Roy Sanger, 28½ days; Mat Salmi, 30 days; Pat Durkins, 30 days.

December, 1914: Pat Durkins, 27 days; Frank Hill, 21 days; Roy Sanger, 27½ days; Mat Salmi, 27½ days.

Independently of the record I remember that all these men worked there. I have given you these days from my own record. I wasn't there in 1913. The first stope I took ore out of in 1914, was the Receiver's stope. I commenced, I think, about February 6th. I recognize the stope on the map, Exhibit 3. There was more or less ore taken out of the Receiver's stope during the year, 1914, except I do not think we took out any in September, November or December. In 1914, also we took ore from the 600 stope that is shown on this map, exhibit 3. The first ore taken from the 600 stope was sometime in the fore part of August; I have the date in my books. There

were some came out of the Columbia raise. There are four levels in that raise. We did not take any from the 700.

There is a Tool drift or Tool stope marked on the map. I ran it, or rather I didn't run it, it was caved; I went through it. It had been stoped before I went there to work. What little ore came out of the Tool stope while I ran through it was picked up right at the McKay cross cut by the motormen,—at the end of the Tool drift, where the Tool drift connects with the McKay cross cut. The ore from the Columbia raise was picked up by the motormen at the bottom of the Columbia raise chute where there was a bin with a chute in the end of it. The ore out of the Receiver's stope was picked up by the motormen right in front of the Silver Hill station. We had several tracks in there. The ore from the Receiver's stope 236 was loaded in the cars in the stope. Rather it was wheeled down out of the stope to the mouth of the stope, and was loaded in cars on the track, then the cars were shoved down the track as they were filled. Myself and two shift bosses, McDonald and McCann kept a record of the ore that went out. It was put down on the book each day as the ore was taken out, sometimes I would put it down, sometimes McCann and sometimes McDonald.

McCann laid off to go fishing in August. I think there was a man named Atkinson who took his place for a couple of weeks. McDonald laid off a few shifts.

I kept a complete record of the ore while I was there. What you call the Receiver's stope now and the Tool drift stope was all called the Elephant stope at that time. We didn't use a tally board at the shaft while I was there in 1914. We made a tally or computation right where the ore started from.

Referring to my book, I see that the first ore that went out in 1914, after I went there was on the 3rd of February. The book I am referring to is marked "shift Boss McCann No. 7, 1914, January, February, April." We didn't take out any ore in January, 1914.

Book marked Exhibit 41.

Now, coming to the figures [opposited] cars of first class in February, those are my figures. According to these figures 19 cars of first class and 92 cars of second class came from the stope in the month of February. Also 27 cars of waste. That ore came from the Receiver's stope as marked on the map.

My attention is called here to the record of some cars that came out apparently in January, as follows: January 27, 2 cars second class; January 28, 5 cars second class; January 19, 3 cars second class; January 30, 1 car first class, 4 cars second class, making a total of 1 car of first class and 14 of second class in January; but as to that I will say these are not my figures. It may be that this ore came out from the night shift in January, but I didn't take any ore out in January, I am positive of that.

Coming now to the month of March, which book has been marked as Exhibit 42 by the reporter, I will say that all these figures are mine. As I add these figures, there came out in the month of March, 9 cars of first class, 25 cars of second class and 25 cars of

waste. That ore came from what we call the Elephant stope, what you call now the Receiver's stope.

237 Now, taking the record for April, 1914, which the reporter has marked Exhibit 43, these are my figures which I am about to give, and they show eight cars of first class that came out of this Receiver's stope in April, 25 of second class.

Referring to Exhibit 44, now marked by the reporter, this is the record for May, 1914. Two shifts are shown here, night and day shift. According to the totals here shown for this month, (May) there were taken out of the Elephant stope 31 cars of first class on the night shift and 30 of first class on the day shift; 41 cars of second class on the night shift and 57 of second class on the day shift; 15 cars of waste on the night shift and 22 cars of waste on the day shift.

In Exhibit 43, in the month of February, there is marked first class ore 2 cars; second class ore 50 cars; waste 17 cars; but that is on the other shift; that is not my writing. I take it to be McDonold's writing, but the ore come from the Elephant stope. There is another place in the same book for February marked at the head "Columbia raise." These are not my figures.

GEORGE D. BLOOD, a witness sworn for the defendant, testified as follows:

I am a mining engineer by profession, and have practiced my profession twenty-five years; I graduated from the University of California in 1892. I was employed by the defendant company in January, 1907, as consulting engineer. My duties took me underground occasionally. I was in charge of the property of the defendant Company from July 1, 1910, to December 31, 1912. I had direct supervision of the work during that time; including that and the Conkling claim. The work that was done under my direction was wholly within the 135 foot strip at the westerly end of the claim. The work consisted of driving the raise called the Columbia raise. There was no stoping in the property while I had charge, except one day, the day I took charge. Men were working in the Incline stope. I had that work discontinued immediately, and thereafter no work was done in the Conkling ground while I had charge of the property, except that done in driving up the Columbia raise.

Cross-examination of Mr. Blood:

I became assistant manager in 1910. Some ore had been taken out of the drift and shipped from the Elephant stope when I became assistant manager. When I became consulting engineer in 238 1907 I saw ore piled back in a drift close to what I believe was called the Treweek raise. It is designated as Tartlet drift within the Arthur claim. I don't know how far within that drift it was stored. I don't recall whether the drift was completely filled with ore or not, or whether it would be possible to go over the ore and determine how long it was. It is possible there was another place it was stored, and it is possible that there were two or three

other places. I stopped all work within that 135 foot strip because we had a very big job on our hands to put up the Columbia raise, and because the air was not too good in there anyway, and because there was no ore then opened up in those stopes that was available to be taken out.

Referring to the original map introduced in evidence in this case marked Exhibit 45, I directed in July, 1910, all work to stop in that part of Conkling claim westerly of the 135-foot line, excepting the Columbia raise. I stopped all stoping westerly of that line. I did so because we had a very big job on our hands to put up the Columbia raise, and because the air was not too good in there anyway, and because there was no ore then opened up by that stope that was available to be taken out. On instructions the stope was stopped on its easterly face by its approach to the 135-foot line. I don't remember what the Incline stope was called. So far as I know that whole country was called the Elephant stope. My recollection is two or three men were working in there in stoping. Two or three men were around there, and there may have been a man running the little hoist there. I cannot remember there were more than that. The hoist was station 477. It was to hoist ore up from ore stopes below the level,—to pull a car up a very flat incline. My understanding is the policy of not working to the easterly of the 135-foot line was followed before I went there. The work had been stopped as it approached that line to keep from going into the Conkling claim proper. My impression is it was the idea that no work should be done in ground and from ore that was conceded or thought to be the joint property of the Conkling and Silver King Coalition. I knew that the ore not taken out from these workings at that time could be mined later after the ground became caved. It was known to be there and could be reached either by winzes or raises from lower levels. I am referring to ore in the neighborhood of the Incline stope and easterly of the 135-foot line. The stope does not extend up to the line, but the face of the stope had ore in it. That is where the face was stopped. The ore could afterwards be gotten from a raise

from the Silver Hill shaft. The Silver Hill shaft was not yet
239 begun, but people may look ahead even a year or two in the development of their properties. I put the Silver Hill shaft off the joint ground. The joint owners of that ground had access to the property during this time. They knew these faces were there or they neglected their own interests because they had access. They could go in there before I took charge of the property. They should have had knowledge that that face of ore was left there. If the Conkling Company didn't know that was there, it neglected its interests. The ore was not to be caved on. The cave would be to one side of the face of ore that I left. The cave would come down in the stope alongside of that face. The face was practically vertical. There would be no difficulty in going in on the east side of that face and taking up the ore and taking it out. It would be very much less expense to take out the ore from that fresh ground than to hold this stope. If it had been the policy of the company to take the ore out at that time, it could be taken just as cheaply from that face, but it

was not the policy to take that ore out. It is wrong to give the impression that the ore was then to be covered up and lost to the joint owners. As to whether that ore over the 135-foot line could have been taken out more cheaply from those workings than by going down the Silver Hill shaft and drifting over under it and running up from beneath, we would have to take into consideration how much ore was being taken from the works that would be driven afterwards. If there was one car or a wheelbarrow full to be taken out there, then to plan to sink a shaft and drift over there and take it out would be more expensive. If a considerable body of ore is to be taken out of there it could be taken out twice as cheaply and perhaps cheaper from such works. I don't know how much ore there was that I left in this unexplored country. I didn't introduce the policy,—I understand it to be the direction of the attorneys of the company that work should not be prosecuted across that line. I know that ore was taken out in driving the Columbia raise. A little was taken out adjacent to the raise in the Engine drift. I do not know what quantity came out, but the drift was in ore. How much of it was saved as ore I don't know. It was low grade material. There was no high grade material, no first class, no ore saved at any time as first class.

There were only two or three men working in the Incline slope at the time I refer to. I am positive about that too, and I stopped those two men. There was some ore came out of the Machine drift from the Columbia raise. I don't know what quantity came

240 out, but it was low grade material. None of it was saved as first class ore at any time from the Columbia raise or the workings therefrom. The Engine drift really driven as a part of the raise to assist in the running of the raise, not as a place to excavate ore or to prospect for ore, but to set an engine to draw timbers up in there. It is marked "Engine drift" on the map. It is also marked "Drift D." There is a drift marked "C" below it. There was no ore saved out of that drift. My impression is that nothing out of that drift was put into the bins. The ore that was taken out was put into the bins on the 500 and a record kept of it, which is in the records of the company. All the ore taken from the Columbia raise and the workings therefrom was accumulated in the 500 bins. After a sufficient accumulation was there, or when it was convenient to put that ore through the mill it was milled separately, and the records of the company will show the ore from the 500 bins milled separately. This record was kept in the regular books of the company. The weight of the mill shows the weights of the ore that were in that lot and the concentrates from the ore was kept separately, and the shipment made separately of the concentrates. The billing was done, I believe, in June, 1911. It was accumulated at the 500 bins at the shaft. There was no ore shipped from the Columbia raise or the workings therefrom. There was some ore taken through the Hanauer and left on the dump from the mouth of the Hanauer tunnel; but it had nothing to do with ore that came from ground outside of the Conkling.

The Conkling people were in the slope occasionally, whenever they desired to go into the mine they had access to it. They had the

privilege of going in. I assumed that Mr. Treweek was a part of the Conkling Mining Company. There were pegs along the tunnel said to be Treweek's survey in there. They remained there a long time. I have seen some of his people in the ground. As I understood it they were privileged to come into that property and see what was going on at any time they wanted to. If they had applied for the privilege of checking up the ore that was going out, they could have had that privilege.

From July, 1910, until December, 1912, I have stated what account was kept, and if any account had been kept for the purpose of delivering to the Conkling Company, I would have known it. There was no account kept or made up to be delivered to the Conkling Mining Company that I know of. After July, 1910, and up to December, 1912, there was an account kept to the extent that I have stated, but not delivered. The record was kept of that ore that was taken out of the Columbia raise and whether it was to the benefit or detriment of the Conkling Company would appear from the weight that is given to it in the Court. To the extent I have stated the ore that came out of the Columbia raise while I had charge of the property,—the only ore that came out of there,—was kept track of. So far as I know that is what I was responsible for, and that is what I know about it. I was keeping track of it for my own satisfaction at least, and for the records of the company, and it is there to be had.

The Court: Mr. Critchlow, will there be any evidence in this case of ore being taken east of the 135-foot line?

Mr. Critchlow: There will be evidence, if I understand the facts, that ore was taken from workings from the Columbia raise to the northerly of the foot of the raise. In what drifts it was taken, from where it came from, we are unable to say, but we haven't yet any knowledge of the fact that Mr. Blood speaks of, of there being a separate account of those ores. This is my first intimation that any such account was kept. I was under the impression that none had been. I will say in fuller answer that whether it come from one side or the other, of course, can make no difference to us, because this line has nothing to do with it, except as a policy line for the company, I suppose. In other words our rights are just the same.

The letter you have submitted to me as Exhibit No. 46 indicates they were suspicious enough to look after their own interests in the matter; they were in a position to look after that ore if they wanted to, and they did go in there.

Mr. Critchlow: We offer in evidence Exhibit 46.

The Columbia raise was run up here as a piece of development work to prove the apex of the country including the 135-foot strip and the ground easterly of that. It is true if we had apex rights at all we had apex rights east of the 135-foot strip as well as west. As to why the Coalition Mines Company should work only up to that line I think the lawyers could answer that question better than

I. As an engineering proposition there was no particular reason for it. I take it was so decided by this court, but I don't know how far east.

EDWARD MCGURRIN, a witness produced on behalf of the defendant testified as follows:

242 My name is Edward McGurrin. I am attorney at law and a member of the Bar of this Court. I was formerly secretary of the Belmont Mining Company and also a director from the time of its organization until it was disincorporated.

I recall a transaction between that company and Thomas Kearns as Trustee sometime during the year 1907. Mr. Kearns telephoned me to go over to his office.

(Thereupon Exhibit 47 was marked by the reporter).

Referring to Exhibit No. 47, which is an option which appears on its face to have been assigned to Thomas Kearns April 6, 1907, I should say it was several weeks before that time that Mr. Kearns telephoned to me. I negotiated between Kearns and Rohlfing about the transfer of the option to Kearns and the negotiations were concluded when that option was assigned to Rohlfing to Kearns. Mr. Kearns had no right or option to purchase any of the Belmont property so far as I know prior to this assignment on the 6th of April, 1907. I think the first payment was made by Kearns on the option about ten days after he secured the assignment, [\$] 25,000.00 was paid on April 12, as appears by the check.

Later within the time required the balance of \$100,000 was paid by the Silver King Coalition Mines Company.

(Exhibit 47 was received in Evidence.)

(Exhibit 47 is in words and figures as follows, to-wit:)

For and in consideration of the sum of ten dollars in hand paid by D. P. Rohlfing of Salt Lake City, Utah, the receipt of which is hereby acknowledged and confessed, the Belmont Mining Company, a corporation of Utah hereby promises and agrees to sell, transfer and convey to the said Rohlfing, his heirs or assigns, by good and sufficient deed of conveyance, all the mining claims and property owned by said corporation including the following described mining claims, situate in Uintah Mining District, Summit County, Utah, viz; the Custer No. 2 Atlanta, Mt. Hope, Mary Jane, Anaconda, Belmont, New York Lode No. 3, Champion, Silver Hill No. 4 and Spring Claim No. 6 (consolidated and patented as U. S. Lot 4850.) the Broadway Fraction (surveyed for patent under survey No. 4866) the Champion Fraction (surveyed for patent under survey No. 4866) to gether with all interest owned by said corporation in the Silver Hill No. 4 lode claim, a portion of which remains un-

243 patented. for the sum of one hundred and twenty five thousand dollars (\$125,000.00) payable to the credit of said Belmont Mining Company at McCornick & Co., Bankers in Salt Lake City, Utah, as follows: twenty-five thousand dollars (\$25,000.00) on

or prior to April 25, 1907, and the remaining one hundred thousand dollars (\$100,000.00) on or prior to July 25, 1907.

Upon the said initial payment of \$25,000. (to be made on or prior to April 25, 1907, being made the same shall be retained by said McCornick & Co., until said corporation shall cause to be properly executed a deed of conveyance of said mining claims and property to said Rohlfing, his heirs or assigns and shall deposit the same with said McCornick & Co., together with the approval in writing of the giving of such deed signed by the holders of not less than one hundred and fifty thousand shares of the capital stock of said corporation, whereupon the said payment shall be turned over to the credit of said corporation by said bank, said deed to be held by said bank subject to the terms hereof.

Said corporation further agrees that upon said initial payment being made it will forthwith cause a meeting — its stockholders to be called for the purpose of ratifying the giving of this option, if in the judgment of said Rohlfing, his heirs or assigns, such action be necessary.

It is expressly understood and agreed by and between the parties hereto that a certain hoisting plant now situate on said mining claims, consisting of boiler, hoist, cages, etc., and leased merely by said corporation, is not included in this option but the same is expressly reserved and excepted herefrom, and the privilege of removing same from said mining claims is reserved by said corporation.

Being an option merely, time is expressly made of the essence hereof; hence if the said Rohlfing, his heirs or assigns, shall fail or neglect to make any payment herein provided for at the time and in the manner specified, this agreement shall be terminated, all rights acquired by said Rohlfing, his heirs or assigns hereunder shall be forfeited and all payments theretofore made shall be retained by said corporation as liquidated damages.

244 In Witness Whereof the said Belmont Mining Company has, by action of its Board of Directors, authorized this option agreement to be executed in its behalf by its president and secretary this 2nd day of February, 1907.

BELMONT MINING COMPANY,
By PATRICK RYAN,
President.
EDWARD McGURRIN,
Secretary.

For value received I hereby sell, assign and transfer the foregoing option to Thomas Kearns Trustee.

Dated April 6, 1907.

D. P. ROHLFING.

June 27, 1907. Payment of the balance of \$100,000.00 having been made to us direct, McCornick & Co. are authorized to deliver the deed to T. Kearns, Trustee or order.

BELMONT MINING COMPANY,
By EDWARD McGURRIN,
Secy. and Treas."

(Endorsed in pencil:) Deed due (?) to A. C. Ellis, Jr. for Kearns, S. A. W."

J. B. SCHOLEFIELD, a witness produced on behalf of the defendant, testified as follows:

My name is J. B. Scholefield. I am 36 years of age. I am a chartered accountant and a member of the Institute of Chartered Accountants of England and Wales.

I was present on Thursday afternoon and evening and Friday afternoon and Saturday in company with Mr. Anderson and Mr. Taylor representing the plaintiff company and Mr. McDonald, Mr. McCann, Mr. Toole, Mr. Jas. Hume and Mr. Harry Hume and Mr. Holland, when the shift bosses' books and time books were examined with a view to ascertaining therefrom how many cars of first class and how many cars of second class any how many cars of waste came out of the various stopes daily according to these books. Mr. Taylor and Mr. Anderson and I independently made a statement of what these books showed for each day; that is, what the books showed as to the number of each class of material that came out with the exception that in some cases we took the total waste in a month for any place. In some cases we took the daily record of waste

245 and in some cases the monthly record only. But we took the daily record from the books of the first and second class ore with one exception, viz: In the month of January, 1915, for the 600 level we have the totals and not the daily figures. This was because we came to that about six o'clock on Saturday night. It was thereupon agreed by Mr. Anderson and Mr. Taylor that Mr. Taylor would supply those figures today. In going through the daily record as was found in these books the figures were identified and vouched for by Mr. McCann, Mr. McDonald, Mr. O'Neill, Mr. Toole, Mr. Hume and Mr. Holland, respectively.

Here is the typewritten statement showing according to the books the total number of cars of first and second class ore that came from the premises in controversy or adjoining it. Here is the one for 1913, 1914, 1915 and 1916. It is headed "Final summary subject to elimination of ore not from Conkling ground. That statement includes in it all, leaving to the witnesses to be produced, to determine how much should be eliminated.

(Paper marked Exhibit No. 48 introduced in evidence.)

The word "doubtful" on that Exhibit means that it is doubtful whether the ore came from the Conkling or outside of the Conkling or partly from within and partly from without. "Retimbering Elephant stope near raise No. 1", means that the ore was taken out while they were retimbering the Elephant stope and the figures show the number of cars of first class and waste that came out of the Receiver's ore drift and then the Receiver's stope.

There is an item on Exhibit, 704 stope, marked doubtful, 247 cars of second class. That word "doubtful" here means that it is

doubtful whether this ore came from the Conkling ground or from other ground.

The totals according to the books in 1913 were as follows: 30 cars of first class, 113 cars of second class, and 157 cars of waste.

In the year 1914, according to the books 910 cars of first class, 6,279 cars of second class, 11,169 cars of waste.

In 1915, the books show 721 cars of first class, 19,586 cars of second class, and 543 cars of waste.

In 1916, 2,335 cars of second class, 281 cars of waste.

(Exhibit 48 received in evidence.)

246 Exhibit 49 produced in evidence, which is some sheets of paper fastened together, numbered from 1 to 26 inclusive.

These sheets are the original sheets upon which I tabulated the figures as they were read from the ore record books and vouched for by the shift bosses. The headings were the headings which were given out from the ore record books as they were read. That is the heading agreed upon by Mr. Anderson, Mr. Taylor and I. The heading "Book 8, 1914", means the figures recorded under that heading came from Book No. 8 of ore distribution—book marked No. 8 at the time we got it. On the first column to the left is the name of the man who vouches for the figures; the second writing is the date of the month; the third and succeeding figures are the figures of ore or waste taken out in that day on that shift. The third column is Elephant stope, first, second and waste, and the next column is Columbia raise, first, second and waste. The next column is Receiver ore drift, first, second and waste, the next Columbia raise, Level No. 1, first, second and waste, and the next Columbia raise, Level No. 2, first, second and waste. The next is Receiver stope. Under the first, second and waste in each of these columns, Elephant stope, Columbia raise, etc., the figures there under the designation "First" represent the number of cars of first class that came from that working daily during the period which is tabulated here.

Mr. Critchlow: In order that the court may understand that a little better, I am handing him Exhibit 43, which is book No. 8 of which you are speaking now.

Witness: Under designation "Second," the figures under that would represent, according to the books, the number of cars of second class that came out during that period from that working; and under designation "Waste", the figures in that column would represent the number of cars of waste, according to the books, that came out during that same period. That de-scription would apply to each one of these sheets separately except the one month of January, 1915, I think it is. That is the month which I before referred to when the book was not there, it wasn't there on Saturday and on the previous day when we were taking these down; I thought it would be sufficient to check the total only, so we checked the total on the book and took that down, and that total is in there. The name of the person who vouched for the figures in each one of these sheets is

247 written on the left hand side against the figures. In some cases there is just a ditto mark underneath, in other cases a tick to show it is the same person.

When I said that there were some months where the total as given in the foreman's book did not agree with the figures in the shift boss' books, as to the number of cars of material of various kinds that went out of a given working, I meant to say the figures in the foreman's book did not agree with the figures in the books for the daily ore extraction given by the shift bosses. That was not generally so, but it was so on the 600 stopes for the year 1915, and three month of 1916. In the month of February, 1915, Mr. O'Neill's book shows 12 cars of second class less than the daily ore extraction book. In the month of March, he shows three less cars of first class than are shown by the distribution books kept by the shift bosses. In the month of April he shows five cars of first class less and 212 cars of second class more. When those discrepancies occurred I took the figures according to the ore record book of the shift bosses. In the month of May he shows one car more of first class than the ore record books show—or extraction books. In the month of June he shows four less of first class and 34 more of second class. The month of July he shows 26 less of first class and 6 less in August of first class. September they agree. In October he shows one more of first class and eight less of second class. I will have to refer to my sheets for November. When we compared the ore extraction book for November with the summary kept in the time book, we found an entirely different set of figures, the second class ore being in most cases 100 cars per day larger than the ore extraction book. I don't know who kept the time book, nobody identified the handwriting. On the 24th of November, there was 14 cars of first class, whereas, the ore extraction book showed no cars of first class. On the 25th the time book showed 20 cars of first class and the ore extraction book showed none. On the 26th, the time book showed thirty cars first class and the ore extraction book showed none. On the 27th the time book showed 18 cars of first class, the ore extraction book showed 13 cars. On the 28th the time book showed 20 cars first class and the ore extraction book 0 cars first class. When we come to the 14th of November, the ore extraction book showed no ore, the time book showed 45 cars second class. On the 15th of November the ore extraction book showed 58 cars second class ore, the time book showed 158 cars second class ore. On the 16th the ore extraction book shows 28 cars second class ore and the time book shows 128 cars second class. On the 17th the ore extraction book shows 35 cars second class ore, the time book shows 135 cars second class. On the 18th the ore extraction book shows 36 cars second class ore, the time book shows 136 cars second class. On the 19th the ore extraction book shows 33 cars second class, the time book shows 133 cars second class. On the 20th the ore extraction book shows 70 cars second class, the time book shows 170 cars second class. On the 21st the ore extraction book shows 20 cars second class, the time book shows 120 cars second class. On the 22nd the ore extraction book shows 24 cars of second class, the time book shows 124 cars of second class. On the 23rd the ore

extraction book shows 74 cars second class, the time book shows 174 cars second class. The 24th the ore extraction book shows 22 cars of second class, the time book shows 14 cars of first class which I think I have previously included, and 122 cars second class. The 25th the ore extraction book shows no first class and 5 cars second class, the time book shows 20 cars of first class and 156 cars of second class. On the 26th the ore extraction book shows no cars of first class and 37 cars second class; the time book shows 30 cars first class, which I have previously stated, and 37 cars of second class. From that point on the second class for the ore extraction book agrees with the second class according to the time book, and I have testified as to the showing of differences on the first class. There was nobody in the room who could identify the figures in that time book for the month of November, 1915.

In the month of December the time book shows no cars of first class, whereas the ore extraction book shows 4 cars of first class. That is for the entire month. In the month of January, 1916, there are no differences, they agree. The month of February, 1916, the time book shows 46 more cars of second class than the ore extraction book. In March there are no differences. I am not prepared to say right now, without going through, whether I have given all of the differences that were detected by us as the investigation was going on. The month of February, 1915, shows 22 cars less of second class ore than the ore extraction book.

EUGENE SLUSSER, a witness produced by the defendant, testified as follows:

Q. What is your full name?

A. Eugene Slusser.

Q. Where do you live? What is your home at present?

A. Why. California.

249 Q. What?

A. California, that is my real home, I have been in Nevada for the last few months.

Q. What doing?

A. Mining.

Q. Whereabouts?

A. Near Tippet, this side of Ely.

Q. Were you ever in the employ of the Silver King Coalition Mines Company?

A. Yes.

Q. In what capacity were you employed there?

A. Little of everything. I worked around the mine, in the mill and in the office a while.

Q. Were you employed about the office in the year 1916, the early part of the year?

A. In 1916?

Q. Yes?

A. Yes, for awhile.

Q. For how long, how late in the year 1916 did you continue?

A. I worked there from about November.

Q. November, 1916?

A. December, a little of January.

Q. I call your attention Mr. Slusser—

A. I worked in 1915 too.

Q. In the year 1915 also?

A. Yes, sir.

Q. I call you attention to the time book for April, 1915, and to those pages especially marked 94 and 94-A and ask you if any of the figures there, first and second class ore and waste were made by you, any of them?

A. No, only these totals are my figures.

Q. The totals are yours?

A. Yes.

Q. As you see figures have been there that have been erased, some of them entirely and some partially; do you know anything about the circumstances under which these erasures were made?

A. Yes, I erased them.

Q. How did you come to erase them?

A. Why I was getting out a personal statement for Mr. Humes, and I consulted him about this and he said take the totals that come nearer the totals of the ore extraction books, so I took these totals and erased those. I didn't have any right to, I guess.

Q. Have any instructions to erase them?

A. No, I just did it on my own hook.

Cross-examination.

By Mr. Ray:

Q. That instruction, I assume, went to all of the tabulations of that sort where you were making up the statements for Mr. Humes?

A. That is the only one.

Q. That is the only one you made?

250 A. The only one I remember of doing.

Q. So this is the only erasure you made?

A. Yes.

Q. Made it without instructions and upon your own responsibility?

A. Yes sir.

Q. It would have been just as convenient to have drawn a line through it.

A. Yes, that is what I should have done.

JAMES TOOLE, recalled by the defendant for further direct examination, testified as follows:

From the time I went to work there in January, 1914, as foreman to the time I quit the 31st of December, 1914, I would know myself the number of cars that went out on my shift. They would be pegged, two for first class, one for second class and no peg for waste. The motorman would know when there was ore to take out

because we would tell him. Either I did or the shift boss would. We would tell him what to peg.

At that time the Silver Hill shaft was being sunk. That is, during the latter five or six months of that year. We began taking ore at the 600 stope before the close of 1914 somewhere about July or August. The waste that came out of the Silver Hill shaft was kept in stationary bin. It went out in the cars through the Alliance Tunnel to the dump at the mouth of the tunnel. A great many cars were being used while we were sinking the Silver Hill shaft and cutting that station, that big station. Cars were bringing in all kinds of material with sand and cement. We were working about two shifts there when we were taking ore out of the Receiver's stope. McCann was on one shift and McDonald on the other. A tally was made up at the end of each shift of what the shift had done. We had a desk right near the collar of the Silver Hill shaft and the tally would be left at this desk, sometimes in a book and sometimes on a tab. A correct record was kept of the number of cars of each kind of material that was sent out. After we began taking ore from the 600 stope it was put in a [bind] in the 500 at the Silver Hill Shaft. Ore taken from that bin was loaded into cars there at the bin, usually by the motorman or the motorman and helpers if he had a helper. Some of the time he didn't have. We had a tally board there at that bin and the tally was kept of what was loaded out of the bin.

The first class, second class and waste from the 600 we dumped into separate compartments on the 500. It was brought up in a skip from the 600 and dumped into the ore bin on the 500. We

251 would tell the motorman what was in the bin and it was our business to know. We would always clean the bin of whatever it contained before putting anything else into it so when they were loading the bin there they would be loading altogether waste or altogether first class or altogether second class. There was a tally board also on the 600 level where the ore was sent up in the skip. That tally board was used to tally whatever was hoisted from the 600. The tally board was kept by the man that run the cars out and dumped them in the skip.

Cross-examination of Mr. Toole:

In 1914 besides the 600 stope there was work done in the Receiver's stope and in the Toole stope and not in a little work done in what we have decided was the Joint Survey stope.

The Receiver's stope was worked in 1914 and also the Toole stope was [work-] in that year.

As to the line on Exhibit 48 reading: Elephant stope, supposed Toole stope (doubtful)"; there is not any doubt as to whether it came from within the Conkling ground. The only doubt was as to the name of the stope from which it came. I don't think there was any doubt about the work that I done, because we done it right there all the time.

The King car was different size from the Alliance. The cars that we tallied weren't always the larger cars used going out. The

King cars would get mixed with our cars. We couldn't keep them from getting mixed. It could happen that there might be some small cars and some large cars. I wouldn't state positive as to that.

ARTHUR McDONALD, a witness sworn for the defendant, testified as follows:

My full name is Arthur McDonald. I am thirty-four years of age. I reside in Butte at the present time. I am a miner by occupation. I have followed mining for about fourteen years.

I was first employed by the Silver King Coalition June 11, 1913, as a shift boss on the Alliance side, and continued there until October 25, 1915, in that capacity. During the year 1913, Marion J. Longmeyer was foreman. He was succeeded by James Tool and James Tool by Con O'Neill. The last time I heard of Longmeyer he was in Victor, Colorado. I was shift boss under Longmeyer from June 11th until January 6, 1914.

252 Referring to the map, there was a little map marked as Joint Survey stope in 1913.

I was with Mr. Frank Anderson and Mr. Taylor and others during the examination of the ore record books in the last few days, and I identified the record there as it was made by me.

Bearing in mind that you are asking me where I mined ore in 1913, I point there to that portion known as the Tool drift and Tool stope; nowhere else.

In 1914, I worked on the Alliance side under Tool, on the station and in the various stopes. I mean the Silver Hill station. I mined ore on the Alliance side in 1914, in a place known as the Tool drift and stope. I mined ore there not only in 1913, but in 1914 also. The books show what came out of that stope in 1914. Also did some work in the early part of 1914 in the Receiver's stope. Also as shift boss in 1914, and I had something to do with cutting out and helping to build or construct the station on the 500 at the Alliance side, and in sinking the shaft.

Before the close of 1914, we took some ore out of the 600 stope. That was taken through the Silver Hill shaft to the 500 level. The first ore taken out of the 600 level was in July, 1914, according to my recollection—a very small portion—and the next was taken out in August, 1914, and from that on until the end of the year. The ore was broken in the drift first on the 600 level; it was taken out in cars to the shaft, and for a short time before the automatic skips was in operation there were a few cars taken up the shaft in the cars; that is, taken up to the 500 level, then taken to the Silver King shaft. I don't know how long it was after we began hoisting ore from the 600 until we had the skip in and the ore bin at the Alliance 500; I can't remember accurately. It may have been six weeks. After we began using the skip the ore was loaded into the skip on the 600 level. It would then be hoisted to the bins on the 500 and dumped into the bins. It was then taken out in cars and taken by the motorman to the Silver King shaft. There was a tally board at that ore bin on the 500, where a tally of the cars

was kept. We continued to work in the 600 stope until about the 25th of October, 1915. We also took some ore while I was shift boss here from the 700. We didn't go down to the 900 while I was there. It was part of my duty to keep a record of the number of cars of each class of ore and material that went out from these stopes while I was shift boss there, and I did it, and did it correctly. There was a tally board also at the 500 near the Silver Hill shaft, as well as at the 600 level. All the ore that came out while

253 I was working there until I quit on the 25th of October, 1915, was tallied and a record made of it in the books. There were two compartments in the bin at the 500 Silver Hill station. One compartment was used for first class ore, second class ore and waste. The other compartment was used exclusively for waste, coming from the 600 from the shaft, from the stations which were used for dumping stations, and from the 700 level.

We didn't mix the first class, second class and waste in that side, which was used for these classes of material. If there was waste in that side and we wanted to put in first class or second class, we cleaned out the waste, and if there was first or second class and we wanted to put in something else, we first cleaned it out; that is, we would have it taken over to the shaft and sent up. We always knew what was in the bin and we would clean out the bin before we dumped any first class in it, and we would empty the first class before we would dump in any first class or any waste. We only had one class of material in it at a time. That was the practice right along.

Cross-examination of Mr. McDonald:

I recall that during 1913, Marion Longmeyer, then foreman, started in to retimber that drift running from station 2010 on the McKay cross-cut, as nearly as I can remember at the present time. I don't remember how long after I went to work as shift boss it was that I was working in the Joint Survey stope. I know I was working there in 1913, because Longmeyer left the employ of the Company in the beginning of 1914, and it was during his time that the work was done. I can't tell you the extent of the work that was done there exactly; might have been a month; I don't believe it was more than six weeks that one man worked in there.

If the record that was put in this morning as Exhibit 48, shows that no work was done there in 1913, and shows there was no ore production in there it may be correct, or incorrect, because we were retimbering there. If I said I was mining in there I said I was retimbering. If a miner is retimbering you still call it mining. I can't remember just how much work was done in the Toole stope and drift in 1914, but I know there was some, and that ore was extracted, first class, second class and waste. If Exhibit 48 does not show it, it is not correct, according to my recollection. I can't state the amount because of the faintness of my recollection.

254 In my judgment, between the 700 level and the 600 foot level there was no stoping at all while I was there, and no

stopping on the 700 level. While I was there there was what was called the 704 stope, but it did not extent above the top of the caps on the 700 level and the 704 drift. It went down about six feet, I think, below the 700 level. There was a little streak of ore there; we went down to get that and throw it out. That was in the year 1915.

Redirect examination of Mr. McDonald:

The stope I have just spoken about is near Station 4412. That raise goes up to the 600. It went up in the country rock, no ore at all. When it reached the 600 there was about 15 feet of drifting from it, but the drift didn't encounter any ore.

J. W. EDMUNDS, sworn for the defendant, testified as follows:

My name is J. W. Edmunds. I have resided in Salt Lake City nearly twenty-five years, during which I have practiced the profession or business of public accountant.

I have examined the books of the defendant Company in my capacity as a public accountant. The first time was in April, 1908. The examination covered a period of eleven months prior to April 30, 1908. I was checking the books then, I think, from the time of the consolidation of the various companies which made up the Silver King Coalition Mines Company, if I recall it right.

I examined all the records pertaining to the financial condition of the Company. The general books were the ledger and the journal and the voucher register. I refreshed my memory as to these books by looking at them yesterday.

Mr. Critchlow: I don't see see the materiality of this, if your Honor please.

Mr. Marioncaux: I will state we expect to prove by these books, the cost of mining and the number of tons of crude ore shipped and the number of tons of concentrates shipped in the various years that are relevant here, and the proceeds from these ores, and it is shown by these books; that is, to show the books were found to be correct by comparing the books with the vouchers for all the expenditures that were made—and the smelting returns.

(Witness, continuing:) In order to find out whether the books were correct, I examined the payrolls, the vouchers, together
255 with the relative invoices making up these vouchers, the ore settlements as received from the smelter. I examined evtrything that was in the office that had any bearing upon the figures shown in the report. I found the books to be correct, the ledger and the journal and the voucher record. As a result of my examination I made a financial statement showing in effect what the books show.

(Hereupon the witness was shown the ledger, and he identified it as the one that he examined).

Mr. Marioneaux: We offer the book in evidence for the purposes of identification, because it is afterwards to be examined by another witness.

Mr. Critchlow: We object to the books being received in evidence. Marked Exhibit No. 50.

(Hereupon the journal was introduced in evidence, marked Exhibit 51.

(Hereupon the voucher record was introduced in evidence and marked Exhibit 52).

(Witness, continuing:) Here is what is called the record of ore sales. This is one of the books that I examined.

Offered in evidence and marked Exhibit 53.

(Witness, continuing:) I also examined the payrolls for 1907, 1908 and 1909.

Offered in evidence and marked Exhibit 54. Hereupon the vouchers for the eleven months' period referred to by the witness, were produced and offered in evidence and given to the Clerk in order that they might be examined by counsel for plaintiff if he desired to do so.

(Witness, continuing:) I examined the vouchers in determining the correctness of these books. I found the vouchers to verify the books.

I examined the books of the Company also for the period beginning May 1, 1908, and ending April 30, 1909, two successive years—one year seven months. I made the same kind of an examination for this second period that I made for this first period. I examined the same books, and also the vouchers relating to the second period. The record was kept in these same books.

I recollect discovering no errors in any of them, and I can say positively that unless they had been correct I would not have given the form of certificate which I find upon my report. I have here what is called a report of financial condition of the Silver King Coalition Mines Company as of April 30, 1908.

(Introduced as Exhibit 55 and so marked by the reporter.)

I also have here a similar report showing the financial condition of the Company as of April 30, 1909.

(Introduced in evidence as Exhibit No. 56, and so marked by the reporter).

DANIEL McCANN, a witness sworn for the defendant, testified as follows:

My full name is Daniel McCann. I am thirty-nine years of age. I reside in Bingham at present. I have resided there about sixteen years. I am a miner by occupation. I first worked for the defendant Company about June, 1904. I was in the employ of the Company until October, 1915.

I do not know of any ore being taken from the Receiver's stope in 1913. I think there was some taken in 1914. I think ore was taken first from the 600 stope in July, 1914. I don't think there was any taken from the 600 stope before July. The ore that came from the 500 level went up the Silver Hill shaft, and it was all tallied and kept account of there.

Before I became shift boss in 1908, I worked on the Elephant stope side. I know that before I became shift boss the Elephant stope had been worked as far to the west as what is known here as the Wet chute, or farther than that, as well as I can remember.

From June, 1913, until October, 1915, my attention as shift boss was given exclusively to this stoping on the Alliance side. I hadn't charge of any other portion of the mine. Before I became shift boss I worked in the Elephant stope as a miner, in 1907. It was from January until May. It was not in the stope, but on that side. I began working in the stope as a miner about some time in April, 1907, as near as I can remember. It was earlier than June. I was working on a machine there. I worked on a machine from January, 1907. I worked on a machine in the stope only about three weeks, as nearly as I can remember. According to my recollection, up to the time I quit working there as a miner there wasn't any stoping done. The work was running a drift in ore. I couldn't say exactly from my recollection how far the drift had been driven in the ore when I quit working as a miner. Perhaps about forty feet, 257 thirty or forty feet. It was in pretty good ore. Most of it shipping ore. After these two weeks I was repairing out around the tunnel, repairing the timbers, putting in timbers. Never worked in that stope afterwards as a miner, or any of these stopes.

In January, 1906, I was running and drifting what they called the Fissure drift. It is the drift in the neighborhood of Station 2010, somewhere in that neighborhood. I couldn't be sure where we started. I don't remember how long I was engaged, a few weeks or a few months—it might be a month.

I became shift boss in July, 1908, at which time the stoping had been carried to the west of the Wet chute. As a matter of recollection I should say that west of the Wet chute the proportion was from eight to ten of second class to one of first class. I remember the Incline stope too. There was a bunch of pretty good ore that went down in there; it was sunk down in a hole in the first place, right under the track there, where the line of division on this map runs between the Incline stope and the Chippie Drift stope, at the westerly portion of it. It was pretty good ore; we had to sort it, of course. When we blasted it out of the bottom it was mixed up, but there was a lot of pretty good shipping ore in it; the balance was mill ore. Aside from that, of which there was about twenty or twenty-five feet along here—it was practically all second class. I know what you call the Chippie Drift stope, but I can't tell you anything about the ratio of first to second class in that stope; I do not remember it very well.

I know the stope that is marked here "Chute stope." That was about the lowest grade stope we had to my recollection; might have

twelve or fourteen cars of second class to one of shipping in there; that is as far as I remember. I don't remember very well the Bench stope, except along the edge of it here. I don't remember much about this stope; I couldn't tell you the proportion of first and second class in that; I have no recollection of it.

Referring to the joint survey stope, I worked through that one, although, of course, we didn't call it by that name. After studying the map here, I would say that this stope, that is marked "Joint Survey stope" was the one that we knew in the mine as the Receiver No. 2. I don't remember any first class ever coming out of there. It was mostly second. In fact, it is only about two feet high or something like that, just a little corner running right down off the side of the track.

258 Cross-examination of Mr. McCann:

Before I became shift boss on the King side I worked running that drift here on the Alliance side. I couldn't give you exactly the date, but I went to work inside the ground that is shown on Exhibit No. 2 and Exhibit No. 3, sometime before the first of February, 1907. I started the east drift there. Then next I went to work upon the drift which is running southwesterly here, which is shown on this map, Exhibit No. 3, as the K-K drift.

We were in good solid ore there, but I can't say the number of feet. I judge perhaps thirty or forty feet. I couldn't say we could send it all out for first class ore; when we broke it it was mixed up quite a lot, it was pretty good ore. When I got through working there I left the face and went to work elsewhere, timbering and repairing, or something of that kind. Then I went over on the King side again about May, 1907, and became shift boss. I came back on the Alliance side again in January, 1908, and ran a machine. I became shift boss again about July, 1908. I was shift boss from July, 1908, until sometime in 1910, on the Alliance side. I don't know for sure that it was immediately that I became shift boss that I went on the Alliance side in 1908, but sometime about that time.

They were working the Elephant stope about that time. There was some first class ore left in the Incline stope when the men were laid off.

When I started to work as shift boss in 1908, Andrew Hurley was also shift boss. We were the only two; we were working only two shifts. I don't think we kept track of the ore from the time I started in there in 1908 as shift boss; I don't remember what time we started to keep track of the ore. I was working in this K-K drift in the early part of 1907, and receiving \$4.00. I was supposed to have charge, looking after the steel and everything that went in. I was getting twenty-five cents more than the other fellow.

I was told that by Mr. Dailey. He told me that I was getting two bits more a day for seeing that the work went along there, seeing that we got steel and everything we needed—seeing that cars and steel and everything was there, so that men could go to work. That was my business as machine man. I was getting two bits a day for doing

just what it was my duty to do anyhow. I learned from Mr. Dailey that the reason why he was giving me two bits a day more was to see that everything got there so that the men could be to work
259 at a certain time, and get to work. Andy Hurley was there, but he was looking after the whole layout. I don't know whether it was too much for one man to do or not. He had to be outside and all over the place I guess. I mean that there was too much work for Hurley to do, and therefore Dailey gave me two bits more a day to kind of look after things there. I got two bits more a day than the other men. Dailey told me that. I don't know that the rest of the men that were there with me got two bits a day more or not. I never heard that. I don't know whether he was giving me two bits a day more in order that I would keep my mouth shut or not. He told me that I was not to talk, and that I was getting two bits a day more. That extra pay continued from January to May, I think. The money was paid to me every month. After May, 1907, I got a lump sum. That didn't have nothing to do with the wages. I don't know what I got a lump sum for in addition to the two bits a day. I got \$100.00 about that time. I don't remember whether I signed a voucher for it or not. I don't know what I got that \$100.00 for—I can't remember. I didn't know I was going to get that. When I got the \$100.00 I did not find out from anybody what I got it for. I couldn't swear now what I got it for. I don't remember whether anybody told me what I got it for. I haven't any idea now why I got the extra \$100.00 unless just by going along and minding our own business and doing our work. It was principally minding my own business. I don't know whether minding my own business means keeping my mouth shut or not. I do not know how many got \$100.00. I can't say whether anyone got it or not, I never saw it. I did not actually see them get it, and I don't know. The other men that were working with me at that time during which I got two bits a day extra were Ted Prudence, Ed Mason, John Neimer, John Mitchell, and those are all that I can remember. When I went back there in 1908, I wasn't told anything about minding my own business as I did the year before. I knew at that time that we were mining in Conkling ground. I knew about a controversy, and an attempt upon the part of the Conkling Mining Company to get in there and make a survey, and saw them in there. I did not know it as Treweek ground where we were working then. I saw the Conkling people in there. I never saw them surveying. I don't know what they were doing. I knew when I saw them in there that there was a controversy over the ground. From that time on, anyhow, I knew there was a controversy.

When I was there as shift boss in 1908 I saw people representing the Conkling Mining Company in there. I don't remember seeing them surveying, but I saw them in there. I don't know
260 what their object was.

Redirect examination of Mr. McCann:

I don't know when I first saw Mr. Treweek in the Elephant stope after I became shift boss in 1908, but I saw people in there representing the Conkling Company practically every other day, or a couple or three times a week after I became shift boss in 1908.

I did get extra wages between February and May, 1907, and was told to keep my mouth shut, to keep quiet, and I did keep quiet. Edmund Mason was there and he told me he was getting extra wages. He didn't keep his mouth shut. There was a fellow named Ferguson that I forgot to mention, and Ted Prudence, who got extra wages for keeping their mouths shut; and Mitchell and John Neimer. This is all that I know of. After the first of May, I went as shift boss over to the King—about the 20th of May. I don't remember just when I got the bonus of \$100.00. I think it was in June, 1907. I don't know whether it was for making good in drifts or what, or whether it was for keeping my mouth shut. I couldn't say what my belief about it is, as to whether it was because I kept my mouth shut. I don't remember whether Mason told me he got \$100.00 or not. There was some of them, I believe, told me they got \$100.00, but I don't remember which of them it was. Mason is the only one that I heard say he got it. The other fellows never said.

GEORGE HOLLAND, a witness sworn for the defendant, testified as follows:

My full name is George Holland. I live in Park City, Utah. I am a miner.

I was employed as a loader on the Alliance side in the year 1915, beginning, I think, February 23rd. There was a strike in the mine in October of that year. I was loader from February until about the 25th of October, with the exception of the few times I served as extra shift boss, or I might have been sick a day or two.

The ore was being taken mostly from the 600 while I was loader—loaded into the cars from the bin at the Silver Hill shaft at the 500. I tallied the ore that I loaded on the tally board there at the shaft, tallied it correctly.

I was one of those who went with Mr. Frank Anderson and Mr. Taylor, representing the plaintiff Company, and identified the record of ore extraction—the record of cars of first, second class and waste sent out. I was shift boss from a time late in November, 1915, until the end of March, 1916, and kept the record and the shift boss books of the cars of first class, second class and waste that went out on my shift. I kept it correctly. * * *

Calling attention to the 600 stopes, the work that went on there after I became a shift boss in November, 1915, until five or six months after that, disclosed as a rule that the ore was pretty much all the same; in fact, I believe it got poorer on both ends of it just before we got through there; around up in the stone—up in what we call the “top stope” now. That was poorer. The bottom stope of the 600 was worked out before I went there, as was also the “middle stope.”

Speaking of the stopes, so far as they were worked while I was shift boss, it was all second class ore with a good deal of iron mixed with it—there was a few bunches of first class; we used to get a car or two out once in a while. We would blast the ore all together, and then we would sort it there and keep it in a pile in the stope. We would keep it there until we got enough so that it would pay us to clean out the chutes.

My recollection is we shipped sixteen or eighteen cars of first class one time out of the 600. • I think that was in 1916. I never worked in what is called the Elephant stope proper. We made one, possibly two shipments from this 600 top stope during 1916—I think we made two from the time I went on in November until March 31, 1916.

Of the 600 series of stopes the 600 middle stope and the 600 stope were worked out when I went there in November, 1915. We did the work after that date in the 600 stop stope, in which station 4465 is found. The two shipments that I mentioned of first class ore, we got in little bunches around the "top stope," that we sorted out and piled up. That ore was got between November, 1915, and March 31, 1916.

As to whether we got any first class near Stations 4283-A and 4412, I will say we used to get little bunches all over, every once in a while, and when we would get one we would sort it out easy, then we would pile it to one side.

CORNELIUS J. O'NEILL, recalled for the defendant, testified as follows:

I am one of the witnesses who met with Mr. Frank Anderson and Mr. Taylor, representing the plaintiff Company, when we
262 went through the ore extraction books, to make up a statement of the cars of different classes of material that went out daily according to the books. I identified the record so far as I kept it, and identified it correctly. I was foreman beginning January 1, 1915, on the Alliance side. I am still foreman. I kept the record correctly on my shift, all the time. I sometimes got my figures from the tally board on top, but generally from the shift boss books.

The 600 lower stope was the first that was worked of the three 600 stopes. It is marked the 600 stope, the stope on the track level. The next one in order was the 600 middle stope, then the 600 top stope.

Referring to these 600 stopes variously called, the first class was generally in small sums probably six or eight inches and sometimes a foot thick, and they did not run very far; sometimes six or seven feet long, sometimes two or three feet long, thinning out to an edge. When the ore was blasted down this first class was picked out by hand and piled away until we would get four or five, sometimes ten or twelve mine cars. Then we would clean out the chutes, clean the second class chute out and let it in and clean the chute on top, and send it on top. The 600 middle and two 600 top stopes which were worked after I went there, in those stopes the proportion of first and

second class was practically the same. The best ore we had in there was to the side of the chute, going on the six to the five, close to it—in this raise here. We had some shipping ore to the westerly side of that raise; about thirty or forty feet up was the best there was. It continued westerly probably about twenty feet. It was all waste through at the top of the raise.

We took some ore in 1915, from the 700—1915 and 1916. I don't know what part of it came from within the Conkling claim. The ore in the stopes from the 700 was about the same grade as that from the 600 stopes. The ore extraction books show what came from the 700.

Cross-examination of Mr. O'Neill:

Referring to the place where I said we got the best ore from the 600, that ore was got right up close to the raise. It was mill ore with the first class sorted out; of course, we got more first class out of that part than we did out of any part of the raise for the size of it. It is pretty hard to answer how much first and how much second class. Three or four per cent of it was first class. That is not a certainty, it is merely the best of my recollection.

233 Referring to Exhibit 3 here is the 704 drift. We were working in that sometime in the latter part of 1915, or the beginning of 1916, I think. The ore was taken out of the 704 stope about February or March 1916, I think. That wasn't a better grade of ore than what we got to the right of Incline in the 600 top stope, but we struck some good ore just before we quit the 704 raise stope. We quit working in the 704 raise stope at the time we got notice of the decision of the Court of Appeals in this case. We stopped also all work in the 600 top stope. The 604 stope, I think, was about sixty or fifty feet above the 600 level. The ore was taken to the Silver Hill Shaft.

Redirect examination of Mr. O'Neill:

The ore extraction books show correctly the amount of ore, first class and second class that came out of each of these stopes I have been speaking about—600 top stope and 704 stope. After we heard of the decision of the Court of Appeals in this case all the work in the Conkling side was stopped.

Referring to the map which shows the 600 stope, 600 middle stope, 600 top stope, the 700 stope, the 704 stope, I am familiar with all of those, and those are the only stopes from those levels that I know anything about.

Recross-examination.

By Mr. Ray:

At the request of Mr. Ray I will examine the maps and endeavor to refresh my recollection, and ascertain whether there are any raises or inclines or any workings in this neighborhood that are not shown on the maps, two, three and four.

I think we worked the 700 drift stope somewhere about the beginning of 1916. There were still some ore there just such as we had taken out when we quit. It is there now on the bottom, but it wouldn't pay to work it, I don't think. The top of the 700 drift stope is now accessible and entered very easily. We piled some waste in there to get rid of it, the cheapest way at the time. The top of that stope is still accessible, but you can very easily get that waste out.

Redirect examination of Mr. O'Neill:

The 700 drift stope is about 8 feet above the track level and about 5 or 6 feet below, about 12 or 15 feet long. The streak of ore is about 18 inches or 2 feet wide at the widest point. The material taken out of there was pretty nearly all waste.

264. Mr. Anderson and Mr. Brooks made a survey there after the decision of the Court of Appeals, and I told them how much waste there was in there. The ore in the bottom of the 700 drift stope was iron ore, iron and zinc. I don't think it would pay to work it. That is the reason we put the waste in there. Anybody who is skeptical about it, you can clean it out in twenty-four hours.

Mr. McCann, recalled, testified as follows:

Mr. Critchlow asked me to examine the books to give him some information as to whether I worked in what I call the Receiver No. 2 stope in 1913 or 1914. I have examined the books, and I find we started to go there May 3rd, 1914, that is, the Receiver No. 2. We didn't take any ore from there in 1913. We started to take ore out of there May 3, 1914.

Cross-examination of Mr. McCann:

We were not doing anything in the Elephant stope from from May to October, 1913. During that time we were working up the Columbia raise. We ran the Engine drift during that time—no, my recollection is, thinking of it, that from May to October, 1913, we did not do any work in the Conkling ground at all, but if we did the ore extraction books will show it.

C. P. Brooks, recalled for the defendant, testified as follows:

At the request of Mr. Critchlow I will give again the volume of material that was removed, measured in cubic feet, from each of the stopes within the Conkling ground for each year.

1907, part of the Elephant stope, 50,000 cubic feet.

1908, remainder of Elephant stope, 27,259 cubic feet—that was within the Conkling lines.

Old Joint Survey stope, 9,861 cubic feet.

1909: Hat stope, 9,150 cubic feet.

Bench stope, 33,500 cubic feet.

Chute stope, 31,165 cubic feet.

Chippie drift stope, 30,480 cubic feet, making a total in 1909 of 104,295 cubic feet.

1910: Ineline stope, 29,355 cubic feet. That was all for that year.

265 1913: Toole stope, 4,505 cubic feet.

1914: Receiver's stope, 18,246 cubic feet.

1915: 600 top stope, 22,148 cubic feet;

600 middle stope, 16,692 cubic feet.

700 drift stope 3,402 cubic feet, total for 1915, 42,242 cubic feet.

1916: 600 top stope, 14,595 cubic feet;

704 raise stope, 1,815 cubic feet; total for 1916, 16,410 cubic feet, making a grand total of 302,173 cubic feet.

I have computed the stoping done outside of the Conkling lines so far as concerns the 600 stopes. I haven't computed that part of the Elephant stope that lies outside of the Conkling claim. I am speaking of the Conkling claim according to patent.

600 stope, three floors high, 64,601 cubic feet—as nearly as we can divide it from our surveys—60,000 cubic feet in 1914, and 4601 cubic feet in 1915, approximately. The totals are correct. The only uncertainty is what proportion was done in each year.

600 middle stope, 1915, 51,820 cubic feet.

600 top stope, January to April, 1916, 10,868 cubic feet.

704 raise stope, 984 cubic feet.

704 drift through ore, 3,430 cubic feet.

The next one is between January and April, 1916.

700 level drifting through ore, 9,030 cubic feet.

704 raise stope, 1,090 cubic feet. The date of the joint survey of the 700 drift stope, I think, was April 13, 1916.

It has been testified that there was a raise put up from the 700 to the 600 within about 15 feet of the 600, and that at that point, about 15 feet below the 600, a drift was driven off at the same time in a southerly direction, and it is stated that it is not shown on the map, but I believe this refers to what we call the 704 drift running from this point marked "raise." The raise is indicated here in the top of the chute. A drift driven from that raise 15 feet below the 600 would be marked 704 drift; it would, because that is what they called it at the time in the mine.

266 Cross-examination of Mr. Brooks:

It was only yesterday that I completed the calculations of the amount taken outside of the Conkling ground in the 600 stopes. I had the notes, but I have never made the calculations before, hence these calculations were not used by Mr. Dickson in making up the account of ores taken out from the 600 stopes.

The work in the Conkling claim, of course, was done between the times I made surveys, and I couldn't tell within a week or a month of the time any particular work was done, but the figures represent the total cavities, as nearly as we could get them.

I haven't computed the cubic feet of material removed from the Elephant stopes proper westerly of the west end line of the Conkling claim as patented. I have got the survey notes, but I haven't figured them out yet.

The maps, Exhibits 1, 2, 3, and 4, shows all the workings under the Conkling claim that I know anything about, all that I ever heard of. I can't tell anything about the actual amount taken out, for instance in 1915, because I did no surveying in the stope between October 1914, and April 1916, a period of eighteen months—no surveying at all in 1915, there. There are no notes of mine that would show what work was done in 1915. It is merely from information. I have no recollection of going into these stopes at all in 1915.

I think I must have misunderstood your question. My notes here show that on January 20, 1915, I was in the Silver Hill shaft, 600 and 700 levels and stopes, and made a survey. Here is my record of the surveys. I commenced at 3910 on the 600 foot level of the Silver Hill and run a line to 4126 in the 600 stope. At that time I measured up the floors of the 600 foot stope; that is, outside of the Conkling. I carried this survey on; it goes about 25 feet in the 600 level, that much surveying I did in 1915, in January. I also surveyed the top and the bottom.

The next place I surveyed in 1915, is shown here, July 7, 1915, 40.8 feet northeasterly from a point in the 700 foot level marked station 4276; that would be practically to the south side line of the Conkling. The survey was outside of the Conkling up to that point. July 12, 1915, I surveyed in those stopes. I have a complete survey of the stope as it stood outlined by its boundaries.

267 October 10, 1915. On October 10, I measured this stope which is known as the 700 drift stope, shown on sections 11 and 12. I was in error when I stated at first the dates when I made surveys in the Conkling ground in my first testimony. My error arose from the fact that I had reference particularly to the Elephant stope, not to the whole of the Conkling ground. I did always consult the superintendent as to the progress of the work that had been done. I consulted Mr. Hume about the dates I have given. If he told me there had been no work done in some portion of the mine I didn't go in there; I took his word for it. If he told me they were working in the 600 stope I would go in. He would say sometimes simply there was nothing to be done in there. It is his oral declarations that constituted the data from which I attempted to state the years in which any work was done, but the amount of work done as shown by the excavations is the result of the surveys.

Redirect examination of Mr. Brooks:

As I have stated my last survey in 1915 was October 10th. I surveyed up to the faces as they were then found in the Conkling ground in these stopes. The next survey was April 13, 1916 with Mr. Frank Anderson. We were there then a week.

The 600 Top stope is all one stope; it is marked in two places to help define it. It will be noted that there is a difference in the shading inside and outside the Conkling.

Recross-examination by Mr. Brooks:

Of course, if I couldn't get into any particular place I couldn't survey there. It happened sometimes in the Elephant stope that between surveys there had been caving. I have endeavored heretofore to point out where such caving occurred and the extent of it.

HARRY G. HUME, a witness produced on behalf of the defendant, testified as follows:

My full name is Harry G. Hume. I am thirty-four years of age. I reside in Park City. I am a miner. Studied at the School of Mines Butte, Montana and the Columbia University of New York. I have followed the business of mining since 1908. I have been employed by the defendant company since November, 1915 as shift boss on the Alliance side. There was no mining done from 268 the 25th of October until the 10th of November, 1915. The miners went on a strike. I continued as shift boss after November 10, 1915 until June 9, 1916. I never knew anything about the so-called Elephant stope. Referring to the stopes below, generally spoken of as the 600 I will say that the 600 sill stope and the 600 middle stope were exhausted when I went there as shift boss first; they had been entirely worked out then. The stopes worked under my supervision as shift boss were the 600 Top and the 704 Top stopes. The 700 Drift stope was worked out. While I was shift boss I kept a proper record of the number of cars of first class, second class and waste that went out on my shifts. I was one of those that worked with Mr. Frank Anderson and Mr. Taylor, representing the plaintiff the other day in compiling the result of the entries in these ore record books. I identified the entries that I was responsible for and did so correctly, of course. I made my entries from the tally boards on the 600, 700, and 500, and sometimes from information given me by the car men when they went off shift. The entries were made daily. The ore that came from the 600, 700 and 900 would be taken up the Silver Hill shaft on the 500 level and from there it would be loaded out of the bin into cars by the motorman or his helper. The bin was a two compartment affair, one side was used exclusively for waste from the shaft and the other side was used either for first class, second class or waste from the mine. If there was one kind of material in that side of the bin that was used for the three classes of material and we wanted to put in something else, we would first clean it out. On the stopes that were worked under my supervision down to the time work ceased in the Conklings ground, there was probably not more than one [car] of first class taken out to 75 or 80 of second class. I am referring to the 600 top stope. Day after day we would take out nothing but second class ore. The first class was sorted from the rest. It was easy to distinguish it. We did not take any ore from the 700 prior to the last of March, 1916, on the Alliance side, inside the Conklings ground.

Q. What about the 704 stope?

A. That all came down from the 600 drift. It was all second class

ore. There was some shipping ore left there when we stopped work upon being ordered to do so, after learning of the decision of the Court of Appeals. If I remember right that shipping ore was about ten or twelve inches thick. There never was any ore taken out of the 900 level within the Conkling ground.

269 Cross-examination of Mr. Hume:

I was there when the strike was called about the 25th or 26th of October, and it lasted until the 10th of November, 1915.

When I was shift boss on- O'Neill was my foreman and superior and my father was his superior as assistant general manager of the property. The shift boss opposite me was Geo. Holland. In that 600 stope sometimes we would have two men working on a shift; sometimes three, that is, men working in ore; we had mucker too. I don't know how many men worked on the shift opposite me but you can tell by referring to the time book.

You are liable to get some first class in bunches at any time when you work in second class ore. The only first class I ever saw in this stope is the one place I have pointed to down here where we had the square sets, which ore was about five or six feet in length and about a foot wide and I don't know how deep. When I say you are liable to get a bunch of first class any time you work in second class ore I am speaking generally.

The ore production record at any rate shows all the ore that came out of the Top stope and the classification of it. I don't remember that from November 10, 1915, to the time I quit working in this Top stope what we mined in waste or took out any. I don't mean that there wasn't any but we were filling the waste back into the stopes.

In March, 1916, when we had orders to quit, we were inside the Conkling ground, although I didn't know it. We got word to quit the 704 raise stope. I was not working on first class ore. There was first class ore exposed, but I had not been working on it on my shift. I don't know whether somebody else's shift had been working on it or not. I found it exposed there and it is exposed there. I can show you two or three faces of first class ore that were exposed that were not worked. My explanation is that when that first class ore in there was struck I was over to the Silver King doing some special work for about a week or ten days. I don't know what the other shift was doing. I don't know whether the first class ore was exposed for a week or ten days. It was there when I got back.

KNIGHT L. CLAPP, produced on behalf of the defendant, testified as follows:

270 My name is Knight L. Clapp. I am an accountant by profession and have been for twenty-five or thirty years. In that capacity I have audited the books of the defendant company. I audited the books for the year ending 1910. I have in my hand here the result of the one ending April 30, 1910. I have another one but I haven't it here right now.

Mr. Critchlow: We have offered and do offer to admit in the record the authenticity of these reports made out by this gentleman and that bear his signature.

Mr. Marioneaux: That he examined the same books that Mr. Edmunds did and will give substantially the same testimony?

Mr. Critchlow: Exactly.

Mr. Marioneaux: Except, of course, that he would testify to a different set of vouchers regarding a different period.

Mr. Critchlow: If there appears to be another one and we think it is material, you will offer the other one?

Mr. Marioneaux: Yes. * * * While we are on the subject, Mr. Critchlow, we might ask you whether you will require us to produce the book-keepers who kept these books which these auditors examined.

Mr. Critchlow: We will admit if produced they will testify they kept the books correctly from the data furnished them at the time.

SAM SGRO, a witness produced on behalf of the defendant, being duly sworn, testified as follows:

My name is Sam Sgro. I am 38 years old and live in Park City. I am working for the Daily-Judge Mine? I worked for the defendant in 1913, 1914 and 1915. (Thereupon the witness gave the date that he worked for the defendant during said years.)

I quit the Silver King February 20, 1915. On the 500 near the Silver Hill shaft there was a tally board upon which was tallied the number of cars of first class, second class and waste that came up. I sometimes did the tallying. When I did it I did it correctly. I remember when ore was struck on the 600 level, it was on the 24th of July, 1914. It was all that ore I would help to load and tally.

271 LEE JOHNSON, produced on behalf of the defendant, having been duly sworn, testified as follows:

My name is Lee Johnson. I am farming at the present time and reside in Heber City. I worked for the defendant in 1914 on the motor and in June, 1915 and part of 1913 and 1914, not always on the motor, however. * * *

Mr. Ray It might save time if we could offer to admit here that these motormen [abd] station tenders will testify that they pegged the ore correctly while they were there or attempted to peg it correctly.

Mr. Dickson: Just show then the time they worked there is all that is necessary.

Mr. Ray: And if all of them were available they would—we will make it broader than that. We admit that the station tenders or loaders or other men whose duty it was to peg it, that they attempted to carry out their duty whoever they may be.

Mr. Marioneaux: That is all?

The Court: Have you the time prepared.

Mr. Marioneaux: It will be unnecessary in view of their state-

nant. They say they assume there were motormen and station tenders, helpers and loaders there all the time and if produced they would testify—you say for all the time?

Mr. Critchlow: Yes.

Mr. Ray: We mean in that admission merely as a basis for the records which you produced here, not to go beyond the record of the books.

Mr. Marioneaux: In addition to this we want to prove by this gentleman, not only that they have pegged it correctly, but that they actually reported it to their foreman.

Mr. Critchlow: That whatever reports they made were made correctly, either oral or written.

Mr. Marioneaux: Yes, and that it was their duty to report. We want to prove by them that they did report to the shift boss or foreman and attempted to report correctly.

Mr. Critchlow: Yes, we have attempted to admit it.

272 Mr. Dickson: Then the only thing is to show the time they worked.

Mr. Marioneaux: Mr. Critchlow says at all times. There were always such men there and we could produce them whenever they were there.

Mr. Dickson: Lest I should forget it, your Honor, will recall that when Mr. Walden was on the stand testifying to the cost per foot of various sections of the Alliance Tunnel or Crescent drift, that he testified as to the cost of various kinds of material that we used in the running of that drift which he obtained from Mr. Flannigan, the bookkeeper, and that Mr. Flannigan had made out a statement and handed it to counsel on the other side, and I understand they will admit that the cost as testified to by Mr. Walden is a correct cost of the various kinds of material at that period.

Mr. Critchlow: Is not this better? We admit that Mr. Flannigan, if produced, would testify that the costs and value of materials as stated in this Exhibit or document were currently correct according to the dates therein given.

Mr. Dickson: That is all right.

The Court: Or took them from the books of the company or made them as an expert.

Mr. Critchlow: We don't care where he got them.

M. J. DAILEY, recalled by the defendant for further direct examination, testified as follows:

I have made a determination of the amount in pounds of shipping ore that would be in a mine car and how many pounds of mill ore in a mine car. I made the determination in 1908 and 1909. The pounds of shipping ore in a mine car would be a little more than 2100 lbs. and of mill ore there would be a little less than 1650 pounds.

I am satisfied that is a very close approximation, within a few pounds, during that period.

Q. Do you remember whether that determination was arrived at by taking the entire number of cars of crude ore that had been ship-

ped during a given period, or the number of tons of crude ore that were shipped?

Mr. Critchlow: We object to that.

Mr. Dickson: I don't care about it if you object to it.

273 C. P. Brooks, recalled for further direct examination, testified as follows:

The face of the Cut Off Drift is shown on Exhibit 24, January 8, 1909, with a little mark across the drift just inside of that red circle; I had not gotten to the shaft at that date; that was the face as I measured it in January 8, 1909. My next survey was February 24, 1909. I ran from Station 2120 marked here back around to the Left Hand drift marked February 24, 1909. At that time they had a little incline and the car in there that went down to the bottom of the bin; There was no place for dumping ore or any arrangement made for getting ore. It was for bringing tools up and timber up. I have a memorandum that we made on March 14; the date is marked here 1909; The King cut-off drift had actually made a connection with the top of that station, the top of the ore bin. It was just a hole there. It was marked as a hole through it, and I went in there to set the point for the grade, to give them a grade to put the timbers and lay the track, and I also put a point through a little hole that was connected with the shaft at that particular point. I called it Frank Dailey's point because it was a point set for him to work from.

It was not then practical to dump the ore into the ore bin; the station had not been finished. It was just a little hole there and they had not timbered it or put the track in. The date I now refer to is March 14, 1909.

The next survey was on April 30, 1909; at that date the track was in and they had it for dumping ore into the ore bin. There is a difference in elevation between the main level of the King 500 and the cutoff drift, or was; the first station of the ore bin was cut below so as to have this drift come in the top of the ore bin; at the present time there is no difference in the elevation; it runs right in and the cars are put on the cage. The Cut-off drift has been changed now so as to bring it to a level with the 500 of the Silver King. That change was made after Mr. Hume went there.

Q. Can you tell the court, Mr. Brooks whether or not any ore was taken in the year 1914 from the 600 within the Conkling ground?

A. I have no knowledge of any, no record of any.

Q. Can you tell from your surveys and the maps whether or not there was any stoping within the Conkling ground within the year 1914 on or from the 600 level? It is important.

274 A. No, there was none coming from inside of the Conkling ground in 1914, neither was there any stoping on the 600 level of the Conkling ground. All the stoping on the 700 level within the Conkling ground is shown upon this Exhibit 3. That would be the 704 stope and the 700 drift stope.

Cross-examination of Mr. Brooks:

Q. Mr. Brooks, according to the record you made a survey in May 1913 in the ground which is embraced in the Conkling and you made no other survey until October, 1914, a period of a year and five months, is that correct?

A. I have a record of a survey made here in company with Mr. Burton on April 25, 1914, up the Columbia Raise and through the Engine and C drifts; in July 20, 1914 up the Columbia Raise; and on October 4, 1914, up the Columbia Raise. * * * I was over there on May 2, 1914 and did some work. I don't know as that was in a stop; it was over in these workings. I was there on July 20, 1914, on the Silver Hill shaft and the 600 foot level; October 3, 1914, on the Silver Hill shaft and 600 and 70 foot levels and stopes.

Q. If you were inside the Conkling exterior lines and made surveys during 1914, prior to October 14, I would like to have you tell us.

A. No, I don't think I was there then. What I have given—

Q. How is it then you are able to answer counsel as I understood you to answer, that during the year 1914 there was no stoping of ore within the Conkling claim?

A. I said on the 600 level because I surveyed on the 600 foot level in 1914 and it had not reached the Conkling line at all. I confine that statement, that there was no stoping within the Conkling, to that level and its adjacent workings, the level and the stopes from it.

You will see on the map, Exhibit 3, the legend which states "July 20, 1914, first survey of 600 level, 220 ft. of level run." That is correct. I didn't see any ore in the level up to that point.

Referring to January 20, 1915, the only record I have of any work done inside the Conkling line from my surveys made on that date was this raise made from the 600 ft. level station 4129 up to the McKay cross-cut at station 4131-A, that is, the bottom of it; the top I represent by the three black squares; there was about fifteen feet of that inside the Conkling line. There was no stoping done there at that time.

275 I have endeavored to ascertain how many cubic feet would be required to make a ton of first class ore or shipping ore and how many to make a ton of milling ore. I took five samples. According to the samples I used the result was as follows:

Sample No. 1, 7.07 cubic feet per ton, that would be the dry weight.

Sample No. 2, 8.37 cubic feet per ton.

Sample No. 3, 8.58 cubic feet per ton.

Sample No. 4, 9.72 cubic feet per ton.

The average is 8.44.

Second class, sample No. 5, 11.17 cubic feet per ton.

I have here the assay sheets of these several samples made by Mr. F. J. Hansen, assayer at the Silver King mine. I gave him the samples on the 6th of May and his certificate is dated May 9, 1917.

The assayer's certificate is as follows:

Sample No. 1:

Oz. Gold 0.05
 Oz. silver 17.5
 Percent lead 36.2
 Percent zinc 21.6
 Percent copper None
 Percent iron 10.8.
 Moisture 2.16 per cent.

Aggregate percentage of lead and zinc 57.8—combined.

I produce here a piece of this sample which you can exhibit.

Mr. Dickson: I will ask your Honor to examine that and examine the fine texture of the rock, free from any porosity I think, that the eye can detect.

(Sample marked Exhibit 59 by the reporter.)

Assay certificate for the next sample No. 2, is as follows:

Oz. Gold 0.02
 " Silver 10.1
 Percent lead 18.9
 Percent zinc 33.3
 Percent copper None
 Percent iron 7.3
 Moisture 2.54 per cent.

276

Percentage of lead and zinc combined would be 52.2.

I have a part of sample No. 2 here also.

(Sample No. 2, received in evidence and marked Exhibit No. 60, by the reporter.)

Sample No. 3, assayed as follows:

Oz. gold 0.10
 " silver 11.7
 Percent lead 19.8
 Percent zinc 14.0
 Percent copper None.
 Percent iron 14.9
 Moisture percent 2.61

The aggregate of the zinc and lead is 33.8.

(Sample No. 3, received in evidence and marked exhibit No. 61, by the reporter.)

The assay certificate on sample No. 4 is as follows:

Oz. gold 0.05
Oz. silver 21.6
Per cent lead 41.0
Percent zinc 4.6
Percent copper none
Percent iron 8.1.
Moisture per cent 2.92

I have a sample of that. That sack is marked No. 4.

Sample No. 4 received in evidence and marked Exhibit No. 62, by the reporter.)

Assay certificate of sample No. 5, shows:

Oz. gold 0.10
Oz. silver 4.6
Per cent lead 7.7
Percent zinc 1.7
Per cent copper None.
Percent iron 11.6
Moisture per cent 1.44.

(Sample No. 5 received in evidence and marked Exhibit No. 63, by the reporter.)

277 Sample No. 1 was taken at a point on the south side of the Tool Drift marked with a cross No. 1 (B) on Exhibit 3. B is for Brooks.

Sample No. 2 was taken at a point about 10 ft. beyond station No. 3162-A in Tool drift and is marked with a cross and numbered 2-(B).

Sample No. 3, at a point on the south side near the crossing on the Elephant stope right opposite to the K-K raise about 20 ft. from it and is marked with a cross and marked No. 3 (B).

Sample No. 4 from the Receiver's stope shown on Exhibit 3, on the Southeast side of the stope is marked by a cross and marked 4-(B).

Sample No. 5 is around on the other side 15 ft. to the west and is marked by a cross and numbered 5-(B), that is, from the Receiver's stope.

In order to arrive at the figures that I have given to show the space occupied by a ton of first class and the space occupied by a ton of second class, I had two boxes, one for large samples and one for small ones.

Sample No. 1 weighed 74½ lbs. and was in one piece. I put some wheat in the bottom of the box and put this sample in it and very carefully packed the wheat around it, shaking the box down well until the box was completely filled and the sample covered with wheat. I tamped the wheat about the rock just as tight as I could get it. That piece of ore was a long piece, probably eighteen or

twenty inches long. There were no holes in it or recesses that the wheat could not enter. The whole sample was like sample No. 1, which has been introduced in evidence. The piece here was broken right off of the piece I used. After filling the box with wheat I very carefully leveled the wheat level with the box. I then had an empty box put close along side and very carefully took out some of the wheat and put it into that empty box until I got a sufficient amount out so I could lift the sample out without spilling any wheat out of the box. I took the sample out, cleaned it, put it to one side, replaced the wheat I had put in this empty box and settled and tamped it down as tightly as I had done it previously and measured from the corners of the box, and from the sides and from the center the vacant space above the wheat. That gave me the cubical content of that sample of ore in inches.

After testing the samples I took off these pieces that I have exhibited here in court.

278 Q. You only took off one piece off of No. 1?

A. I repeated the same process with all the other samples, that is, with the first three samples I used the larger box.

Of sample No. 2 I used $38\frac{1}{4}$ lbs. It was all in one piece. I pursued the same method with that.

Sample No. 3 I used 13 lbs. in one piece.

Sample No. 4 I used $8\frac{3}{4}$ lbs.; that piece was broken up. It was almost impossible to get a one piece sample out of that.

There were seven pieces in sample No. 4. All the pieces that I produced here are representative—each is a part of the ore that I used in making my tests. As to the seven pieces in No. 4 they were all the same character of ore. They were one piece but I broke them in getting them out.

Sample No. 5 I used $8\frac{1}{4}$ lbs. No. 5 in taking it out fell into eight pieces.

After taking the samples I have introduced here as parts respectively of the samples that I used in my tests, I took what remained down to the assay office and gave them to Mr. Hansen, asking him for the determinations which I have read here. They were all marked as you see them.

Mr. Critchlow: It will not be necessary for you to call the assayer.

Cross-examination of Mr. Brooks:

I got the samples on May 5, of this year and took them to the assayer on May 6. These determinations were made and the amended account was filed on May 14. I don't know anything about the amended account except I saw it handed to the court here.

In the first account filed Mr. Dickson took as his figures for a space occupied by a ton of ore, the figures found by a former action in this court.

Mr. Critchlow: There is no secret about it. He took as to first class ore the finding of Judge Marshall in the Parsons Stope case. (Silver King Consolidated Mines Co. vs. Silver King Coalition Mines

Co.) and one foot less for second class ore than the determination in that case.

(Witness, continuing:) I didn't give my figures to Mr. Dickson on the 6th. It was sometime after that he got them from my office.

Mr. Dickson: I got them but I filed the amended account on the 14th of May, 1917.

279 Mr. Chitchlow: Up to this point the only evidence that is in the case as to any number of tons—any number of tons of first class or second class ore taken out in 1907 is in the account filed—did you furnish to counsel, Mr. Brooks, the number of tons to be embraced in the account?

A. Yes, sir. In furnishing that tonnage I used the figures nine cubic feet for a ton of first class, eleven cubic feet for a ton of second class. I furnished counsel for defendant with the number of cubic feet in the cavity 1907, and he made the division to determine the tonnage. I did not furnish him with any information, however, as to the proportion of first or second class or waste. I don't know where he obtained information on those points.

Mr. Dickson: If you will call me, Mr. Chitchlow, I will tell you just how it was done. I mean call me as a witness.

Mr. Critchlow: I don't want to do that, I will take your statement, of course. I didn't understand the account. I wanted to see what the basis of it was.

Mr. Dickson: Take the first year, I took the number of cubic feet that had been determined by Judge Marshall in the Silver King Consolidated action that would be required to make a ton of first class ore. I assumed from conversations I had with different people that at least eleven cubic feet would be required to make a ton of second class ore. I assumed from the best information I could get that for the year 1907, there was one ton of first class in—one in three; for every two cars of second class there would be one car of first class, then I had the total cavity for that year 50,000 cubic feet; On that assumption nine feet for a ton of first class and 11 feet for a ton of second class, and there being one in three I figured the tonnage in place. There being one in three—then having the total cavity, of course, it was simply a matter of calculations to see how many tons of second class there would be in each of those cavities. That was the method I pursued right through. The same in 1908. I made the same assumption as to the number of cubic feet that would be required of each class of ore to make a ton.

Mr. Critchlow: What did you say you figured as—anything for waste at all?

Mr. Dickson: Not in the first two years I did not; I should have done so; my information was not as detailed then as it was later on, but the other years I did from information I had, stated the amount,

280 the volume of the cavity that was waste, just as stated there, and the reason for filing the amended account, May 1, 1917, was that in my calculations—my arithmetic I had made some minor errors in some of the years.

Mr. Critchlow: What was the percentage of waste taken off for the first year which you say you did take?

Mr. Dickson: I took one-fifth waste. One-fifth waste for 1909 and 1910, none for 1907 or 1908; for 1913, 1914, 1915, if my memory serves me I assumed one-fourth waste, from information that I had.

Mr. Critchlow: May I ask you another question? In the last account, the one that is amended here, it would seem as though you had taken the proportion of one to eight, one ton of first class to eight—

Mr. Dickson: One in nine, yes.

Mr. Critchlow: In the first account, that does not seem to be the proportion taken.

Mr. Dickson: No, that is one of the mistakes I made; that is another reason for filing the amended account, instead of saying one in nine I said one to nine in the first account.

Mr. Critchlow: I figured it one in $11\frac{1}{2}$. It figures out exactly that way.

Mr. Dickson: No, if you allow for the waste it does not figure out that way. In the first account I assumed there were eight tons of second class to one ton of first class; instead of saying one in nine I said one to nine, in one instance, thus making it nine tons of second to one ton of first. The correct way would make eight tons only of second to one of first.

Mr. Critchlow: In 1915, what was the ratio Mr. Dickson? I could not get that.

Mr. Dickson: I have a memorandum at the office. I will give you my recollection if you wish it. It was one in 28 * * * one in 28 or one in $28\frac{1}{2}$. Of course, among other data I had bearing on that I had seen for a good portion of the time the shift bosses' books, had taken the number of each class as shown by the books.

(Witness Brooks, resuming:) I gave the round number 50,000 cubic feet as the size of the cavities excavated in the Conkling ground in 1907, because it came very close to that, within a few cubic feet, as nearly as I could divide it between our surveys. As I have stated

I had to go by the date of our surveys, making an estimate
281 between our date of surveys, it came practically to that point.

This 50,000 cubic feet is not arrived at by means of proportioning the excavation inside and outside of the Conkling ground, there was nothing outside figured at all in that year. It was all inside. So far as the year 1907 was concerned, it matters not what was ever taken outside. The proportion which I have arrived at is the proportion between years, not between localities.

In the next year, 1908, however, there was some part of the Elephant stope lying outside of the Conkling ground; the cubical contents that I have given for the year 1908 embraces only the excavation within the Conkling ground.

In the testimony which I gave yesterday on this subject I said nothing about the cavities excavated up the Columbia Raise. I had no knowledge of the ore came out of them except what I was told. They appeared drifts with some ore scattered through them.

Redirect examination of Mr. Brooks:

With reference to the box of wheat, I had it made sufficiently large so that I could work around the edges of a large sample and I would first put two or three inches of wheat in to keep the sample from touching the bottom of the box; then I poured the grain in slowly, working it around first by my hand; and from time to time I had another man assisting me, he being at the other end of the box. We would shake the box, shake it up, let it drop on the floor so as to settle the wheat and thus I settled the wheat and packed it tightly as possible.

J. B. SCHOLEFIELD, produced on behalf of the defendant, testified as follows:

I audited the books of the defendant for the years ending April 30, 1912, April 30, 1913, and eight months ending December 31, 1913; calendar years 1914, 1915 and 1916; up to 1914 the fiscal year was from April 30 to April 30.

In auditing the books for the years stated I examined the voucher records, together with the vouchers, journal, the ledger, the ore sales books, pay rolls, and mine time book. I made the financial statement or report. I hand you the first one showing the earnings and expenditures for eight months to December 31, 1913. This
282 is a true copy of my original statement for the eight months ending December 31, 1913.

Mr. Critchlow: I don't ask that you put in the original since you say it is a true copy.

(Received in evidence, marked Exhibit 64.)

I next produce a copy of my original statement showing the earnings and expenditures account for the year ending December 31, 1914, of the defendant company.

(Received in evidence and marked Exhibit 65.)

Next is a copy of my original statement of the earnings and expenditures account for the year ending December 31, 1915 for the defendant company.

(Received in evidence and marked Exhibit 66.)

The next is a copy of my original statement of the earnings and expenditures of the defendant company for the year ending December 31, 1916, for the defendant company.

(Received in evidence and marked Exhibit 67.)

I have brought into court and they are here now all of the vouchers of the various years for which I audited the books. Also all of the smelter settlement sheets. I have right here also and produce now, ore sales books for 1907, 1908, 1909, 1910, 1913, 1914 and 1915, and the first quarter of 1916. This first book here which I

ed to you covers the period from June 7, 1907 to January 1917. In these books I have made a correct tabulation of the number of crude ore shipped after May 1, 1907, to the end of the year, the amount received therefor, and also the concentrates shipped monthly during that first period. The complete tabulation is in the books that I now introduce. These sheets cover the period from May 1, 1907 to June 30, 1910, and from May 1, 1913, to March 31, 1916.

Dr. Critchlow: Do I understand what you now present is a continuation made from this book that has been introduced as Exhibit 53? The Witness: Yes, sir. It is made from that book and from five other shipments of ore contained in this other book. ↓

Q. It contains a complete monthly record of all lots of crude ore were shipped from May 1, 1907, to the end of that year and a correct statement also of the amount received therefor, and the average price per ton for the crude ore?

A. Yes, sir.

Q. That is, average price per ton, I mean the net proceeds per ton as received by the company from the smelter?

A. Yes, sir.

Q. Also every lot of concentrates in each month of that period, number of tons and the amount received per ton from the smelter?

A. A summary for each month and total for each month.

Q. And the average price of slimes that were shipped and the net proceeds of slimes?

A. Yes, sir.

Dr. Dickson: I will read the headings of the first column, first column covers from and including May, to and including December, 1916, and it is headed "Silver King Coalition Mines Company, exclusive of ore sales from May 1, 1907—June 30, 1910." The first column is headed "crude ore, net weight;" next column "Net proceeds, crude;" the next "average price per ton;" the next "concentrates;" next "Net proceeds concentrates;" next "Average slimes, per ton, net proceeds from slimes," "Average price per ton;" and last net proceeds."

Dr. Dickson: I offer these in evidence.

The Court: Let the record show that all of these papers that you offered in evidence be received.

Papers thus received in evidence marked Exhibit 68, by the record.)

Witness, continuing:) I have also here the book showing the present lots of crude ore shipped by the company to the smelter, number of tons in each lot, and price per ton from January 1, 1917, to May 1, 1907. I have made a tabulation of that. This will be the old Silver King Company, one of the predecessors of the company of the Silver King mine of the present defendant.

Mr. Critchlow: I hardly see the materiality of that, Mr. Dickson; may be some materiality; it is the predecessor of the company.

Mr. Dickson: I want to show the few months before we commenced taking out ore here (meaning the Conkling ground) that the ore shipped from the mine was as good or better than it was after we began to take ore out of the Conkling.

The Witness: This is described as the ore and concentrate records, Silver King Mining Company.

284 (Introduced in evidence as Exhibit 69.)

Q. Have you with you, Mr. Schoefield, the smelter settlement sheets for the number of lots of ore that were contained in the K-K Company's ore sales book?

A. Yes, sir.

Mr. Dickson: We have not made a tabulation of this because it is very short. * * * Maybe the proof is not in the order in which it should be, but we expect to prove that these lots of ore shown in the K-K Company's ore sales book came out of the Elephant stope and were shipped in the name of the Keith-Kearns Company just before the consolidation of that company and other companies so made to form the present defendant company. We expect to show what was received for that ore.

Mr. Critchlow: That is new evidence that I did not know about; that makes it perhaps material.

The Witness: I now refer to the "Ore concentrates Keith-Kearns Mining Company."

(Received in evidence and marked Exhibit 70.)

According to this book there were three lots of ore settled for in May, 1907, or three in May and one in June, 1907—crude ore.

Q. Give the tonnage and all the data and information the book contains respecting each of those lots of crude ore first?

A. All the data?

Q. Yes.

A. The first one is dated May 8, 1907, lot No. 1 gross weight in tons, 375,360 pounds; moisture per cent 2.06 net weight in pounds, 365,601 pounds.

The next addition is headed "A. S. & R. Co." lead per cent 30.4.

Silver ounces per ton 23.8.

Gold ounces per ton .04.

No copper.

No zinc.

No sulphur.

Assay values, Silver King Mining Company, lead per cent, 32.9—

Mr. Critchlow: I suggest that merely the difference in assays between two assaying outfits—isn't that pretty immaterial?

285 Mr. Dickson: I don't care for it. Just leave out the assay values. Give the price per ton.

The Witness: Basis of price?

Mr. Dickson: Yes.

A. Date of New York quotations 5-1-07.

Lead per cwt. \$6.00.

Silver per ounce 65-7/8.

Gold per ounce \$19.00

No copper

Values per ton, lead \$31.98

Silver, \$14.92

Gold, 95 cents.

Copper nothing.

Total contents:

Lead pounds—120,282.73

Silver ounces—4,359.79

Gold ounces—914

No copper.

Gross value per ton—\$47.85

Working charges, freight, and so forth \$15.00

Net proceeds per ton—\$32.85

Total net proceeds—\$6,005.00.

Q. All that detail matter follows each one of these lots. Take the next lot and give the number of tons and the gross and net value per ton?

Mr. Critchlow: What I was suggesting you leave out was the two assay returns, but I do think you better put in the average upon which the settlement was made.

Mr. Dickson: Just put the whole thing in.

Mr. Critchlow: Put the umpire assay in.

Mr. Dickson: Just read it all; it won't take long?

A. May 14th, Lot No. 2 gross weight 411,000 pounds.

Moisture per cent 2.1

Net weight pounds, 402,369 pounds.

A. S. & R. assay—lead per cent 36.7

Silver ounces per ton—21

Gold ounces per ton .06

A. S. & R. Assay—lead per cent—36.7

Silver ounces per ton 21

Gold ounces per ton—.06

Silver King Mining Company, assay values.

Lead per cent—37.2

286 Silver ounces per ton—21.3

Gold, ounces per ton—.6

Average—lead per cent—36.95

Silver, ounces per ton—21.15

Gold, ounces per ton—.06

Basis of price, date New York quotations 5-7-07:

Lead per cwt.—\$6.00

Silver per ounce 64-7/8

Gold per ounce—\$19.00

Values per ton:

Lead—35.92

Silver \$13.03

Gold—\$1.14

Total contents:

Lead—148,675.35 pounds.

Silver, ounces—4,255.05

Gold, ounces—12.07

Commercial values and charges:

Gross value per ton \$50.09

Working charges, freight, etc. \$15.00

Net proceeds per ton \$35.09

Total net proceeds—\$7059.56

Q. Take No. 3 and leave out these several assays made, one by the smelter, one by the Silver King, and the average, omit that and read everything else.

A. May 23rd, Lot No. 3.

Gross weight, pounds.—303,340

Moisture, per cent—2.6

Net weight, pounds—295,453 pounds

Basis of price, date New York quotations 5-16-07.

Lead per cwt.—\$5.00

Silver per ounce—65-5/8

Gold per ounce—\$19.00

Values per ton:

Lead—\$34.26

Silver—\$12.22

Gold—\$1.00

Total contents:

Lead, pounds—104,147.18

Silver, ounces—2,895.44

Gold ounces—7.76

Commercial values, gross value per ton \$47.48

Working charges, freight, etc.—\$15.00

Net proceeds per ton—\$32.48

Total net proceeds—\$4,798.16.

287 Q. All three of those were crude ore. What is the next lot? A. The next crude lot?

Q. The next lot in the order?

A. The next lot in the crude order is June 12th.

Q. Go ahead with it?

A. June 12, Lot 4, gross weight pounds,—266,340 pounds.

Moisture per cent 4.3

Net weight pounds 254,887 pounds.

Basis of price, date New York quotation 6-4-07;

Lead per cwt.—\$6.00

Silver per ounce—67.2

Gold per ounce—\$19.00

Values per ton—\$32.85 for lead

Silver—\$11.50

Gold—71 cents.

Lead pounds—86,151.81

Silver ounces—2,293.98

Gold, ounces—4.78

Gross value per ton—\$45.06

Working charges, freight, etc.—\$15.00

Net proceeds per ton \$30.06

Total net proceeds—\$3,830.95

Q. Now that is all of the crude?

A. Yes, sir.

Q. There are two lots of concentrates, are there not?

A. Yes, sir.

Q. Just give the concentrates?

A. May 25th, Lot 1:

Gross weight pounds—313,620 pounds.

Moisture, per cent 4.5

Net weight, pounds—299,507 pounds.

Basis of price, date New York quotation 5-23-07:

Lead per cwt.—\$6.00

Silver per ounce—67 cents.

Gold per ounce—\$19.00

Values per ton:

Lead—\$39.22

Silver—\$13.68

Gold—86 cents.

Total contents:

Lead, pounds—120,851.07

Silver, ounces—3219.70

Gold, ounces—6.74

Gross value per ton—\$53.76

Working charges, freight, etc.—\$15.00

Net proceeds per ton—\$38.76

Total net proceeds—\$5,804.45.

288 Q. The next one?

A. June 12th, Lot No. 2

215,160 pounds.

Moisture, per cent—4.9

Net weight, pounds—204,617 pounds.

Basis of price, date New York quotation 6-7-07

Lead per cwt.—\$6.00

Silver per ounce—55½¢

Gold per ounce—\$19.00

Values per ton:

Lead—\$41.99

Silver—\$15.22

Gold—\$1.00

Total contents:

Lead, pounds—88,394.54

Silver, ounces—2,460.52

Gold, ounces—5.37

Gross value per ton—\$58.21

Working charges, freight, etc.—\$15.00

Net proceeds per ton—\$43.21

Total net proceeds—\$4,420.75

Q. Have you with you the smelter settlement sheets for those four lots of crude and two lots of concentrates?

A. Yes, sir.

Q. What is this you now hand me, Mr. Scholefield?

A. This is the settlement sheet for lot 1 crude, Kearns-Keith Mining Company, dated May 8, 1907.

Mr. Dickson: I offer this.

(Exhibit 71, marked by the reporter.)

A. This is settlement sheet of Lot 2—crude, Kearns-Keith Mining Company.

(Exhibit 72 marked by the reporter.)

A. This is settlement sheet of Lot 2, crude, Kearns-Keith Mining Company.

(Exhibit 73 marked by the reporter.)

A. This is settlement sheet of Lot 4, crude, Kearns-Keith Mining Company.

(Exhibit 74 marked by the reporter.)

Q. This is what?

A. Settlement sheet of Lot 1—concentrates, Kearns-Keith Mining Company.

(Exhibit 75 marked by the reporter.)

289 A. Settlement sheet of Lot 2—concentrates, Kearns-Keith Mining Company.

(Exhibit 76 marked by the reporter.)

The Court: These documents may be received.

(Witness, continuing:) Exhibits 77, 78, 79, 80, 81, 82 and 83 are the cost of mining and milling by the defendant company. I hand you a summary showing such costs for the years 1909, 1910, 1913, 1914, 1915, and 1916, eliminating the cost of sampling and tramming.

(Exhibit received in evidence and marked Exhibit 84 by the reporter.)

C. P. Brooks, recalled for further direct examination, by the defendant, testified as follows:

I produce here a map showing the surface of what is known as the Belmont Mining Company's ground, the Conklings as surveyed for patent and also as marked by posts on the ground, the ground

belonging to the Silver King Coalition and the ground belonging to the Keystone Mining Company.

Q. What ground belonging to the Silver King Coalition is shown outside the Belmont on that map?

A. The colored light green portion surrounding the Conkling, to the south side of the Conkling. Now names are marked on the claims just the exterior boundaries are shown. That colored in blue on this map gives correctly the names and description of the claims that were conveyed by the Belmont Mining Company to the Silver King Coalition Mines Company in 1907.

(At this point counsel for plaintiff admitted the costs of the improvements set out in the account filed.)

M. J. DAILEY, produced on behalf of the defendant, recalled testified as follows:

Prior to the time I left the company's employ in July, 1910, there was no method by which the mill ore from the Conkling ground could have been treated anywhere except in the defendant's mill; unless treated there a new mill would have to be erected. If the second class ore had been taken from the Conkling claim out of the Alliance Tunnel to its mouth, it would have been impossible to dispose of it at any profit; It would have been impossible to dispose of it at all. There was no custom mill in Park City or in that country and there is none there now.

After treating the ore in the defendant Company's mill there was no way to get it to the railroad depot except over the trams here, or except by team and that would cost a great deal more.

As to the crude ore it could not have been taken out of the Conkling ground more economically than it was taken out than by sending it up the Silver King shaft and over the tramway to the railroad depot. That was the cheapest possible way of handling it. The only other way was to take it out along the Alliance Tunnel to its mouth and haul it from there to Park City by wagons.

It could not be handled by team in the winter time at all on account of the heavy snows. Of course the ore could not have been taken out of the Silver King shaft without using the Silver King hoist.

While I was there the mine buildings of the Silver King were actually used in the mining of ore from the Conkling as well as the ore from elsewhere in the Silver King mine and so the mine machinery of the defendant company was necessarily used for the benefit of the Conkling ore; so likewise the blacksmith shop, the carpenter shop and the sampler building, machinery and main tramway and the upper coal bin and the lower terminal; the water and fire system was necessary for the protection of the improvements mentioned.

Mr. Dickson: In arriving at the amount fairly chargeable to the Conkling Company for the use and benefit derived from our improvements, we have taken the cost which you have agreed upon, Mr.

Critchlow, and then considered the number of tons of ore treated in each period from the entire mine, and the total number we estimated we treated from the Conkling, and then charging the interest on the total expenditure for these amounts, etc. against all the ore, ascertained the proportion of the interest thus properly chargeable to ore from the Conkling claim.

J. B. SCHOLEFIELD, recalled by the defendant, further testified as follows:

We have made a tabulation of the sales of the crude ore and concentrates of the Silver King as shown by the ore sales book for the last three months of 1906, first four months of 1907, and 291 also for the year 1912? This tabulation is merely for convenience. The books are right here and the ore sales sheets. This tabulation shows the tonnage and the average price per ton of crude ore and concentrates for October, November and December, 1903.

(Tabulation received in evidence marked Exhibit 86.)

There is also a similar tabulation here for each month of 1912.

(Tabulation received in evidence marked Exhibit 87.)

This tabulation I hand you shows the tonnage and average price per ton of crude ore and concentrates for the months of January, February, March, and April, 1907, received in evidence and marked Exhibit 90.

M. J. DAILEY, produced on behalf of the defendant, recalled, testified as follows:

There is a winze on the McKay cross-cut, southerly of the east drift where station 3033 is found. That winze was put down in ore for about five or six feet, and it was five or six feet by seven, something like that. In it [is] there was some first class and second. I sunk thirty or forty feet, not deeper, but did not take any ore out except at the top as I have stated. That is, outside of five or six feet of the top.

Q. It appears from exhibits already in evidence that certain ores four lots of crude ore and two lots of concentrates according to the settlement sheets were shipped in the month of May, some of them, and the balance in the month of June, 1907, and in the smelter settlement sheets, it is stated it is Kearns-Keith shipments; do you know where the ore came from?

A. I do. It came out of the Elephant stope, all of it, and out of this winze that I have mentioned. The ore that I have heretofore stated that was stored in the drift or drifts, was included in these four lots of crude and two lots of concentrates that were shipped in May and June 1907.

The only ore that went into these shipments is just the ore from the Elephant stope. I am entirely positive on this point. There is no doubt about it.

Mr. Critchlow: I would like to inquire whether there is any question but what the Silver King Coalition Mines Company, the defendant here, assumes the responsibility for the ore taken out and shipped under these six shipments referred to as K-K shipments by Mr. Dailey?

292 Mr. Dickson: No. We are accountable for it.

(Witness, continuing:) The K-K Company did not ship out any ore in the year 1907 prior to the shipment of these four lots of crude and two lots of concentrates which came from the Elephant stope and which I have been testifying about.

My estimate of the weight of a car of second class ore is a little less, I think, than 1,650 pounds, and my estimate of the weight of a car of first class ore is something over 2,100 pounds. The size of the car was 16.7 cubic feet.

Exhibits 88 and 89, being certain typewritten statements on yellow paper for the months of August and December, 1908, showing to the best of my ability the cost of current operations, were made out for my private files and for the company, and similar statements are on file from May, 1908 to July, 1910, inclusive. All these statements were gotten out by my clerk under my direction.

The 16.7 cubic feet car which I spoke of was one of the ordinary cars used on the Silver King side, and my estimate of the weight [of] the ore, first and second class, which it would take to fill this car was of the general run of mine ore, and not ore from any other stope. It would include both carbonate and sulphide ore. Sulphide ore is heavier than carbonate, so the weight would be greater in each case if the ore were exclusively sulphide ore.

Redirect:

If there were the same percentage of lead in the ore the sulphide would be heavier than the carbonate, and if there were zinc in the sulphide ore, and none in the carbonate ore, it would make the sulphide ore heavier, and if there were more iron in one than the other that would affect it.

I last made measurements of the cars to ascertain their cubic capacity over seven years ago.

CORNELIUS J. O'NEILL, recalled for the defendant, testified as follows:

I can point out on the map places in the mine where during the joint survey of Mr. Anderson and Mr. Brooks I indicated the depth of waste that was in the 600 stope. I gave them my best judgment and I was familiar with it.

Referring to the 600 stopes, I mean by that the stopes marked 600, 600 middle and 600 top stope. There was waste in these

293 stopes. It varied in amount. There was more in some places than in other places. Take the 600 Top stope all through, about fifteen per cent of it was waste; in the middle stope about seven or eight per cent. There were places in the stopes where there was more than fifteen per cent. There was as much as thirty per cent waste in some parts of the stope, and from that down to three or four per cent.

Cross-examination of Mr. O'Neill:

We were filling waste—back-filling waste into the 600 top and middle stopes in 1916; I don't think we were doing so at the time of the joint survey of Anderson and Brooks.

We quit work in the Conklings ground upon being advised by the company of the decision of the Court of Appeals. We had stopped putting waste in there sometime before. We put no waste in after we stopped working in the Conklings.

JAMES HUMES sworn for defendant, testified as follows:

I am 58 years of age, and am at present superintendent of the defendant company. I was first employed in that capacity on the first of December, 1912. Mr. Blood remained there the balance of that month. I have followed the business of mining since 1879 continuously in Nevada, Arizona, Colorado, Montana, Utah and British Columbia. I have been superintendent, foreman and manager. I have also studied books on mining. I have run many drifts through many kinds of rocks, thousands of feet, miles of drifts, often in limestone and in quartzite and in granite also.

No ore was taken from the Alliance side in December, 1912.

It is stated in the account on file, I understand, that in 1913 there were 162 feet of drifting done as development work. That work was not all done in one place. Referring to Exhibit No. 4, I will say that work was started about here at Station 2612 and continued to the end of that drift. There is 65 feet there back to the incline, the Columbia raise; 40 feet from Station 2612-E to Station 2613-H—just about there, near that Station. Then in 1913 we also came out here on the Engine drift a little ways. I don't know how far. I have it in my notes. My notes read this way: "Engine drift all that part east of the Columbia raise and from Station 2612-C southerly to the connection with Old drift." That footage is 110 feet altogether. The balance that makes up the 162 feet was done in the Toole drift. I have notes on this sheet showing the actual cost of running the drifts to be \$12.00 a foot.

294 For the year 1914 we advanced the Custer drift from Station 3612-M. In the year 1914 there was drifting 331 feet, and drifting 102 feet. That was all within the Conklings claim.

Q. Whereabouts?

A. The Custer drift—Station 3612-M.

Q. Where the Custer drift enters into the Columbia raise?

A. Yes sir, westerly 2612-Q, 15 feet. * * * Crosscut north

and south from Custer drift 96 feet, from this point in the Custer drift north and south; drift "C" from Station 2581-C plus $14\frac{1}{2}$ feet to Station 3581-D.

Q. The starting point would be 14 feet westerly of Station 3581-C?

A. Yes, to Station 3581-D, 54 feet; crosscut north from this point Station 2581-C minus $14\frac{1}{2}$ feet, 34 feet. Custer drift from Station 2612-M, plus 7 feet to Station 2612-Q, plus 7 feet to Station 2612-Q plus 15 feet, 133 feet, all within the Conkling ground. That work cost \$12.00 a foot. (Trans. p. 1271.)

There is 102 feet mentioned in the account starting from Station 3908 plus 48 feet that cost \$15.00 a foot. Also in that year there was a raise equal to 15 feet of drifting, that is the raise from the 600 level to McKay's drift. 15 feet of that at one end is within the Conkling line. That portion of the raise within the Conkling ground is equal to 15 foot of drifting at \$25.00 a foot.

There is another item, Station at the top of the raise from the 600 level is equal to 58 feet of work; it is about 35 feet in length, but it's double width some places—more than double width. The cubic contents of that station is equal to 58 lineal feet of drifting at a cost of \$10.00 per foot.

In 1915 there is charged for 39 feet of drifting. That's on the 700 foot level. Starting point is on the south side line where that drift crosses the south side line of the Conkling claim; Station 4276 plus 48 feet, the distance being 39 feet. It cost \$12.00 a foot. For that year there is a charge of one compartment raise equal to 15 foot of drifting. That is the chute from the 600 level to the 600 middle stope at Station 3910-A. It is shown on the map Exhibit 3. That work cost \$10.00 a foot.

Then there is a three compartment raise equal to $52\frac{1}{2}$ feet. That starts from Station 3909 $\frac{1}{2}$; cost \$25.00 a foot. There is another single compartment raise 16 feet—3910 in here—that we have not had before. The cost of that would be \$10.00 a foot.

For the year 1915 there is a charge of drifting 115 feet; that was in the Engine drift, from Station 2612-S to Station 2612-U plus 21 feet; cost, \$12.00 a foot. These drifts were for prospecting; to find and develop ore bodies that we had not yet known anything about.

The only mining we did in 1913 was in the Toole drift. We run the Toole drift in 1913, but did not do any stoping there, although we took some ore out of that drift. That's all the work we did in 1913 within the Conkling, to the west of my recollection in the way of mining ore.

In 1914 we did some work in the Elephant stope, marked on this map "Receiver stope"; that was a local name given to it by the miners because there was an air receiver in there; I understood all of it was called the Elephant stope.

Q. Was that what is now marked as Receiver stope on the map—was all that mined in 1914?

A. I think we didn't mine any after 1914 in that stope. I know

the stope referred to by some of the witnesses as the Receiver No. 2 stope. That was mined also in 1914.

This is all the stoping we did in 1914 within the Conkling above the 500 level.

There is a piece of work known as the Receiver's drift that was mis-named Receiver's drift, easterly of Station 3324. That drift was run in 1914.

Q. Is that all the work that you did in 1914, that is shown upon this map, in the way of extracting ore?

A. All the work that is shown by those lines, the Receiver stope, Receiver No. 2 and Receiver drift.

Q. In 1914 did you mine any ore from the Toole stope?

A. Not in my recollection; that was done in 1913.

Q. Did you mine ore out of the Receiver stope in 1913?

A. Only from this point coming in that direction; part of the drift was in ore. There is a little piece shown here on this map Exhibit 3 as stope connecting with that drift—we ran that drift into the old workings of the Elephant stope. The stoping had been done before I went there.

We never took any ore in the Custer drift shown on map Exhibit 4 within the Conkling at any time; nor any from the C drift. We took some from the Engine drift easterly from the Columbia raise. That would be inside the Conkling. We disposed of that ore by putting it back here near Station 2612-E; it was stored from 2612-E back beyond 2612-H. It never was taken out. It is still there. That's all the ore that was taken in driving the Engine drift.

Referring to what is shown on this map Exhibit 4 as the K-K level No. 2, we did no work in there only in the way of repair work and cleaning out loose dirt. I heard the testimony that some ore was taken out of a portion of that drift and stored. It was taken to the mouth of the Hanauer tunnel and it's there now. During my administration there was no ore that came from within the Conkling sent down the Columbia raise to the tunnel level. Referring to Incline raise No. 1, marked Raise No. 1, and another one marked Raise No. 2, and another one marked Raise No. 3, no ore mined from within the Conkling was sent down either one of those raises during my administration. The raises were put up under my administration. There was ore encountered in No. 2 outside of the Conkling ground; also in Raise No. 3, but outside of the Conkling ground. There was no stoping in that raise. The ore was encountered in driving the raise up.

Now, we will go to the 600 map. The ore from the 600 stopes and the 700 and the 900 of course was reached through the Silver Hill shaft. That shaft had to be sunk a hundred feet to take ore from the 600 level—the distance between the 500 and the 600 levels. It would have to be sunk of course deep enough also to provide a sump for water, say 15 feet more. The shaft for that distance in my judgment would cost a minimum \$125.00 a foot. There was water encountered in sinking that shaft before it got to that depth, water

from the beginning, and pumping machinery was necessary. That was true all the way down to the 900 level. At the present time there is nearly 700 gallons a minute. When we got to the 900 there was 500 gallons a minute.

If this Silver Hill shaft did not give access to the ores on the 600, 700 and 900 they could have been reached by a shaft in the Conkling ground. Such a shaft would have cost \$50.00 a foot. If we had not sunk the Silver Hill shaft we could not have reached the ores developed from the 600 unless we sunk some other shaft.

We first began taking ore out of 600 to the best of my recollection in July, 1914.

Referring to the 600 stopes as including the stoped marked 600 on the map, 600 "middle" and 600 "top" I visited those stopes sometimes twice a week, sometimes not more than twice a month; I would say I visited that part of the mine once a week on an average. I went there to observe the conditions.

Q. Was there any waste in that stope?

A. Yes, sir, * * * Sometimes I would say the percentage of waste to ore would reach as much as 25 per cent or one-fourth waste; other times it would be perhaps one-twentieth.

Q. Which predominated in amount, the shipping ore or the mill ore in those stopes?

A. The mill ore greatly predominated. * * *

Some days the books would show nearly all the production might be first class, but this was because it had been accumulated in the stopes for months perhaps. When we got a small shipment we sent it over to the sampler. You will understand that in order to change from one ore to another, they have to clean all the chutes out and get everything arranged and keep the ores separate and clean. We didn't do that very often. We wouldn't do it for a few cars of shipping ore. We would not send the shipping ore up into the ore bin on the 500 level as it was mined. When it was sent up to the 500 bin it had to be taken out immediately, in order to get it out of the way for the milling ore. So we would accumulate a small shipment of shipping ore before we would send it up to the 500 bin, from twenty to sixty mine cars or thereabouts. The first class was sorted from the second class in the stopes. The first class ore occurred in thin lenses from six inches to a foot in thickness; but the rock would break down in a bed three feet thick. The miners break it up and in doing so segregate the larger pieces of the first class from the mill ore and the waste. They would sort out pieces of first class as big as a navy bean. We sorted the ore as carefully as practicable.

Q. Did you say a navy bean?

A. Small particles, just so a man could pick them up or scrape them to one side with a shovel, as small as he could separate. When we thus sorted the shipping from the mill ore we would put the shipping ore off in one corner of the stope where it wouldn't be covered up with other ore or waste, and we would do that from day to day until we got a shipment. * * * My best recollection is

there was the one place where there was shipping ore of any quantity in these stopes. * * * It was at the point where the square sets are shown, Station 4471. It didn't extend very far southerly because it wasn't in extent north and south only but a few feet. I should say that shipping ore was about 6 feet wide by 7 or 8 feet long and not over 2 feet altogether in thickness; but it wasn't in one solid mass, it was in various layers at that point. The other layers were mill ore and waste. This body of ore had to be sorted.

Q. What proportion of that body of ore would you say was shipping ore?

A. The proportion of the dimensions I just give you. More than half of that body was shipping ore. The shipping ore in these 600 stopes occurred in small lenses, thin lenses, especially when we would strike a fissure, a small fissure in the rock, the ore would make into first class up against that. What do I mean by small lenses? I mean a few inches thick.

Q. Apart from this place where you have already indicated where the square sets are shown, what is the largest body of shipping ore in those stopes that you yourself ever saw?

A. Largest lenses, I couldn't give any dimensions, it occurs in kidneys maybe 18 inches by 18 inches; foot and a half square.

Q. What about the Top stope, the shipping ore in the Top stope?

A. I don't recollect that we had any there in the Top stope.

Q. How long a period, if at all, measured in days, would there be when you wouldn't get any shipping ore out and it would be all mill ore?

A. Sometimes several months.

Q. Without getting any shipping ore?

A. Yes, sir.

Q. But taking out daily mill ore?

A. Yes, sir.

There is a fissure running through these stopes, a subsidiary fissure extending from the edge of these square sets from the westerly edge going easterly, running through Station 4471 or in that neighborhood, through Station 2484 on the 500 foot level, that's the general course. The ore in close proximity to the fissure was the best, more lead and cleaner lead. As you got away from the fissure there was no ore; sometimes we would run on a little lobe.

Q. How was the ore on the 700 within the Conkling as to first class and second class?

A. Wasn't any first class in the 700.

Q. How about the 900?

A. We are not within the Conkling lines on the 900.

The mill ore from these 600 stopes could not have been disposed of at any profit if it had not been treated in defendant's mill. There was no other place where it could have been treated, there being no custom mill in Park City. There never has been during my time.

299 Q. What would have been necessary in order to enable anyone to mine the ore on the 600 stopes, the 700 stopes, the crude ore, and dispose of it if it were not sent up through the Silver King Company's hoist and shaft and trammed to the railroad, what other way could it have been?

A. The only way I could see or understand how it could be done would be to leave as much of the second class as you could in the stope and put the balance on the dump.

Q. What would be necessary to do at the dump in order to get it to the railroad depot where it could be sent to the smelter?

A. The logical way would be to build an ore house.

Q. Would an ore house be practically indispensable?

A. Not necessarily so; but it would have increased the cost without one.

Q. How?

A. By making it necessary to shovel the ore.

Q. And how many times would you have to shovel it if you hadn't an ore bin there before you got it on the cars?

A. That would depend upon the accessibility of the ore dump to wagons, ore wagons.

Q. If the dump was in such condition so an ore wagon could be driven up close to it when shoveling—you mean having to shovel it, men putting it on to railroad cars?

A. Have to shovel it out of the wagon into railroad cars.

Q. If one undertook to take the crude ore out through the Alliance tunnel to the mouth of the tunnel, what, in your judgment, would have been the proper thing to do, the cheapest way of handling it, to build an ore bin, or dump it on the dump and shovel it into wagons?

A. It would depend on the quantity that it would be possible to get out of the mine. If every little, — would not pay to build an ore bin. It would not pay to build an ore bin for a thousand tons.

If the ore was not sampled by the mine owner or the operator, you would have to employ an expert to go to the sampler and sample the ore with the sampler officials. * * *

Q. Have you, Mr. Humes, a list of other stopes that were worked in the Silver King mine during the years 1913, 1914 and 1915?

A. I have.

Q. And the proposition of first and second class ore from each stope?

A. I have.

Q. Including the Elephant stope?

A. Yes, sir.

Q. Produce it. Give the names first of all the stopes that were being worked each of these years. We will omit 1913; very little came out according to the testimony so far—take 1914 and 1915.

300 A. 1914, 700 level stopes, that's at the King (referring to the original Silver King property and not to the Alliance side) 1 car of first class, 297 cars of second class.

800 level stopes, 1,653 cars of first class; 13,918 cars of second class. I am giving these figures from the records, the same kind of books you have been examining here in court.

Mr. Dickson: If you object to this, Mr. Critchlow, I must recognize the objection as proper, and will have to call the people back and show their figures for these stopes. (the stopes the witness is referring to)

Witness, continuing: Flossy winze: 204 cars of first class; 1,037 cars of second class.

Creole: 215 cars of first class; 9,839 cars of second class.

900 stopes: 1,503 cars of first class; 34,341 cars of second class.

1100 Hanging Wall stope: 156 cars of first class; 3,523 cars of second class.

1,250 level Brown raise: 1,312 cars of first class; 11,999 cars of second class.

Skiddo: 399 cars of first class; 1,574 cars of second class.

Mud Section stopes: 3,871 cars of first class; 7,039 cars of second class.

American stope: 5,217 cars of first class; 1,976 cars of second class. (Page 1292)

Keller stope: 2,040 first class; 3,362 second class.

Hanauer: 475 cars first class; 344 second class.

Q. The totals for that year?

A. 17,048 cars of first class; 88,249 of second class.

Mr. Critchlow: Permit me to ask, the Hanauer, does that mean the Alliance?

Witness: No, sir, it means the Hanauer.

(Mr. Critchlow:)

Q. I didn't see the Elephant stopes in there.

Mr. Dickson: No, they have been given already by the shift boss's books.

Mr. Critchlow: I thought he might as well give the manager's record for it too.

301 The witness, continuing: Coming to 1915, these figures are worked out in tons instead of cars, for the year 1915.

Mr. Critchlow: Are these tons or cars?

Mr. Dickson: For the year 1914 he has given the cars.

The witness, continuing: 1915, Morrissey stope, 25,124.04 tons of first class; 3,810.97 tons second class.

Skiddo: 1,596.87 tons first class; 488.37 tons second class.

Hanging Wall: (In Brown) 338.885 tons first class; 2,354.24 tons second class.

Carthy stopes: 153.18 tons first class; 390.88 tons second class.

Mud stopes: 262.3 first class; 223.23 second class.

Hanging Wall: 101.16 first class; 1,289.12 second class.
Creole: 638.95 tons first class; 5,513.79 tons second class.
Fire stopes: 215.08 tons first class; 600.37 second class.
Royal stopes: 247.61 tons first class; 5,347.7 second class.
Fiossy: 90.23 tons first class; 1,269.1 second class.
Victor Section: 65.05 tons first class; 5,730.93 tons second class.
Old stopes: 218.23 tons first class; 1,247.23 tons second class.
Hanauer: 1,096.41 tons first class; 1,625.89 tons second class.

Mr. Critchlow: That doesn't read anything from the Elephant stope either.

Mr. Dickson: No, we have the record on the Elephant stope in.

Mr. Critchlow: Not in tons.

Mr. Dickson: No, but in cars.

Q. Do you remember, Mr. Humes, of having heard of the decision of the Court of Appeals in this case?

A. Yes sir; we heard of it in March, I believe, 1916. We then stopped mining in the Conkling ground. We did some work in the stopes on the 600, putting them in shape so they would keep open for an indefinite period. But we took no more ore out of the 302 Conkling ground of any grade, after the decision.

Cross-examination of Mr. Humes:

I spoke of the Receiver No. 2 stope, but let me explain myself. I considered this a part of the Elephant stope. I looked at it as a whole, by one name. I referred to the Receiver No. 2 stope, I did not refer to any stope above the level of the top of the Receiver stope because there is no stope to my knowledge above that one.

Witness here points out position on the map of the Receiver No. 2 stope.

I never heard it called Receiver No. 2 stope in the mine. I've heard other witnesses here describe that as the Receiver No. 2; there was not a stope above the Receiver stope. A thin lens was worked out at first. That was the Receiver stope; as I say, to the best of my recollection we came back and took out another thin lens over that. Why it should have been called the Receiver No. 2, I don't know; it was all one stope; I have heard of them speak of the Receiver No. 2 stope.

Q. Do I understand you correctly to say that no ore at all came down the Columbia raise from the Custer drift, that's correct, is it?

A. There was no ore, as I said, mined from this point to that point sent down the Columbia raise.

Q. Was there any ore mined in any part of the Custer drift that came down the Columbia raise?

A. There was times when this raise here could not be used for sending ore or waste, and in that event it might have been run through here, out there and down through the Columbia raise.

Q. But whether it did or not, you don't know?

A. Not positive; might have been done when I was not there.

Q. But I have understood you to say that no ore did come down either from the raise No. 3, Raise No. 2 or Raise No. 1, except such ore, if any was taken out, as was encountered while pushing up the raises?

A. Yes sir.

Q. And that might, you don't know, have gone up through the Custer drift and down the Columbia?

A. In the event we couldn't get down the other chute.

Q. But that you know nothing about?

A. No.

Q. I understand you that no ore whatever came down the Columbia raise from the Engine drift?

A. Not in my time, not since the beginning of 1913.

Q. Did any ore come out from any part of the Engine drift which lies outside of the Conkling ground?

303 A. If I am not mistaken we did have some ore in putting up that raise.

Q. Where did that go?

A. That must have went down the Columbia raise. How much there was of it, I can't tell.

This map shows all the workings that we had done and shows the size of the drifts.

Q. Was any ore taken out through the C drift and taken down the Columbia raise?

A. Not unless, as I stated before, it was taken out of this Raise No. 2. I can't say as to that. I don't remember when that connection was made. Custer drift marked "A" was called No. 1 level; Custer drift marked "B" No. 2 level; Engine drift marked "D," No. 3 level.

Q. Where did the first class ore which came down from Level No. 2 through the Columbia raise come from?

A. Level No. 2, if it came from anywhere, came out of Raise No. 3. That's the only place I know of where it could have come from, from out of Raise No. 3. I don't know how many cars came out of Raise No. 3 except as the records show. If the records show 511 cars of second class ore came out of that Level No. 2, it must have come out of those raises.

Q. Did you have a slope connecting with this raise not shown on this map?

A. Everything that I remember is shown on that map. I know that there was no workings there that are not shown on this map. I would say there is not any stoping connected with this Raise No. 3, because the map shows there is none. There is room in that raise to furnish the ore that you have mentioned. In putting up that raise there was no chance to sort the ore. It nearly all went to the mill; the first class was picked out of it and put to one side.

Q. What part of the Custer drift did any ore come out of within the Conkling ground that came down the Columbia raise?

A. Not any.

Q. From the west line of the Conkling was there any stoping of ore in that drift No. 1, or Custer drift—level No. 1, I should say?

A. No, there was no stoping in the drift; the drift swelled out—we had some ore in here (indicating); we didn't stope it. We took it out on the level of the drift. I couldn't say how many cars, or whether any of it was first class. My recollection of that is too indefinite.

Q. Level No. 3, or the Engine drift, the only ore you know of there was taken out east of the Columbia raise, which would be, of course, in Conkling ground?

304 A. No, not the only ore I know of; the only ore mined within the limits of the Conkling claim was mined east of the Columbia raise.

Q. Was there any ore taken out west—in the Engine drift or level No. 3—west of the Conkling line?

A. Yes sir, it came out of that raise.

Q. Is there any stope connected with that Raise No. 3 not shown on the map?

A. No sir.

Q. You have spoken about the percentage of waste. Was there any difference in the percentage of waste in those parts of the stopes on the 600 and above and below it laying to the south of the Conkling side line from that laying north of the Conkling side line?

A. Difference in percentage of waste?

Q. Yes.

A. That half of the stope is always the best. As it goes into the country rock it gets poorer, no matter which direction we went. For instance, the rock here (indicating) was very poor.

Q. Way down at the southwest corner of the 600 Middle stope?

A. Yes sir.

Q. I really did not ask for so much detail. I asked you whether, in your judgment taking the stopes as a whole there was any more waste north of the Conkling side line than there was to the south of it?

A. No sir, not particularly in ore—I want to qualify that statement.

Q. In the stopes themselves, I am speaking about?

A. Going out here for instance, we had to break waste in order that the men might have room to work in.

Q. Can you answer the question any differently from what you have, or don't you know anything about it?

A. The ore is just about as uniform grade.

Q. And the stopes would be about a uniform grade as far as waste is concerned, isn't that true?

A. Yes sir.

Q. What became of the waste from these stopes. Was it back-filled into the stopes?

A. Yes, when we had room for it, when we got far enough ahead so we could fill in.

Q. How about the quality of the 600 stopes as a whole as com-

pared with the Receiver stope in the production of first and second class ore?

A. During my time it was just about the same.

Q. You wouldn't say there was much if any difference?

A. No.

305 Q. What do you think was the proportion between first and second class in these stopes, what did you state it was, how much first and how much second?

A. I didn't state, Mr. Critchlow.

Q. Well, what was your judgment about that?

A. For the whole stope?

Q. Taking the 600 stopes, those are the only ones you worked?

A. Yes.

Q. What was the proportion?

A. About one in fifty or sixty, I would say, about one ton in fifty or sixty.

Q. That would be the same in the 600 Middle stope, 600 Top stope and Receiver stope?

A. You asked me the stope as a whole. That is my answer.

Q. How does it come that in 1914, while you were superintendent there you took 479 cars of first class and only 798 cars of second class out of the Receiver stope? Did you fail to tally the second class ore, or did you have less second class ore than fifty or sixty to one?

A. No.

Q. What is the fact about it?

A. The fact of the matter is this, for every car of ore that we took out of there we had more than one car of waste.

Q. Of waste?

A. Waste rock.

Q. Did you tally the second class ore as waste?

A. I don't suppose they did.

Q. Do you know anything about it?

A. You ask me the ratio of the 600 stope.

Q. I asked you about them all. You said they were all about the same.

A. Pretty much the same.

Q. So far as the ratio between the first and second class was concerned?

A. I said as to the grade.

Q. As to the grade of first and second class?

A. Yes.

Q. About the same?

A. Yes.

Q. What did the Silver King Coalition do with all second class ore that came out with the first class?

A. Sent it to the mill.

Q. Why didn't you tally it up?

A. It was tallied.

Q. Where is the tally?

A. In these books.

Q. You only show up 798 cars; where is the rest of it?

A. That must be correct. The records will have to stand as they are because I believe them to be correct.

Q. Have you any judgment about the ratio between the first and second class ore? Why did you fix it at one to fifty or sixty?

A. That was in the 600 stope. I did not say that that was the proportion in the Receiver stope. You asked me as to the 600 stope. These records show what was taken out of the 600 stopes. I am positive there was no more ore came out than is shown in these books; no more waste came out than is shown in the books.

Redirect examination of Mr. Humes:

The Silver Hill station cost approximately, apart from the pumping machinery, just the station and machinery, the hoist, \$125,000.00.

I have brought here the reports for 1914 and 1915 that Mr. Critchlow called for. The paper I now hand you is my annual report to the general manager for 1914. This report was made in 1915 in the early part of the year. (Marked Exhibit 91.) This document that I next hand you is my report to the general manager for the year 1915. (Exhibit 92 marked by the Reporter.)

The report for 1916 is in the company's office.

Q. In your report for 1914, marked Exhibit 91, I find Alliance, Elephant stopes, 99—is that cars or tons for 1914?

A. Cars.

Q. 99 cars of first class and 423 cars of second class. Do you know what part of the Elephant stope that came from?

A. No, I couldn't say definitely.

Q. What stope were you working there in 1914?

A. What is known as the Receiver's stope, that's where the principal work was done in the Conkling in that year anyway.

Q. Now, according to the shift bosses' books, and the tabulation that has been made by gentlemen representing both sides of the case, the Receiver stope yielded instead of 99 cars of first class, 479 cars. How do you account for that discrepancy? (Page 1323.)

A. Must be an error on my part taking the items from the different books from the different stopes.

Q. You cannot account for it in any other way?

A. No sir.

Q. According to the tabulation made by those gentlemen, there came in that year from the Elephant stope 798 cars of second class, and your report shows but 423 cars of second class from that Receiver stope. Is there any explanation for that?

A. Only what I gave for the other. Whatever discrepancies there are between my report and the shift boss's books is the result of errors of mine in going over the books and making additions.

307 The 600 stope means the stope on the 600 level. There is a discrepancy between my figures and the shift boss's books on that too. The Alliance 100 level means the 600 level. Sometimes we

call it the 600 and sometimes we call it the 100. It is 100 below the 500, just as sometimes we call the 700 the 200. Of the 600 stope the first one mined of course was the 600 stope. That was mining which commenced on the level and went upward one floor after another. Next you would have the Middle stope and next you would have the Top stope.

Cross-examination of Mr. Humes:

In my report to the general manager I designated the Elephant stope as a whole. • • •

Redirect examination of Mr. Humes:

By Mr. Dickson:

Q. Mr. Humes, since court adjourned yesterday you have been to the mine?

A. Yes sir. • • •

I have brought with me all of the shift bosses' ore extraction books of the Silver King side for the years 1913, 1914, 1915 and 1916. I have them right here in this sack.

Mr. Dickson: They are here, gentlemen, for you to make any examination of them you wish.

Witness, continuing: On that trip to the mine last evening I made inside measurements of the cars that were used in tramming ore to the shaft. There are two sizes of cars. There are cars 43 inches long by 28 inches wide by 24 inches deep, and there are cars 48 inches long by 30 inches wide by 24 inches deep.

Q. Are you able to tell us how many cars of crude ore in the entire mine were taken out in the year 1913, and how many cars of crude ore were shipped?

A. Yes sir.

Q. From what record are you able to give that, to arrive at that conclusion?

A. I could get the number of cars from the shift bosses' ore extraction books.

Q. Did you do that yearly as the work went on?

A. Yes sir.

Q. At the end of the year you had a statement made up from those books?

A. Yes sir.

Q. Which showed the number of tons which had been shipped during the year of crude ore, and the number of cars, according to the shift bosses' books that had been taken out of the mine?

A. Those books show the number of cars.

Q. I say, you would know the number of tons of crude ore shipped by the smelter returns?

A. Yes sir.

306 Q. Which are already in evidence?

A. Yes sir. I would know the number of cars of first class and the number of cars of second class that had been taken out of the entire mine by what was shown on these shift bosses' books which I have brought into court. From that I could ascertain what the average weight of a car of first class was. Each year also I kept a record of the number of cars of mill ore that went into the mill from the entire mine, and I would know the number of tons of concentrates shipped from the ore sales books.

Mr. Dickson: That part of it I'll have to prove by some other witness, the mill ore.

Witness, continuing: In 1913, first class ore in a car average 2,131 pounds. In 1914, 2,009 pounds. In 1915, 2,098 pounds. In 1916, 2,381 pounds. The average weight of the ore in a first class car for the four years therefore was 2,155 pounds.

Taking the shift bosses' books for the number of cars of mill ore that went into the mill each of these years from the entire mine, and the mill sheets, I each year ascertained and made a record of the weight per car of the second class ore.

Mr. Critchlow: What basis of concentration.

Mr. Dickson: I will prove that by another witness.

Witness, continuing: Second class ore in each mine car, according to the record, in 1913, 1,527 pounds; 1914, 1,163 pounds; 1915, 1,523 pounds; 1916, 1,418 pounds. (See page 1418) The average for the four years was 1,408 pounds.

Q. Have you those shift bosses' ore extraction books that are in this sack arranged chronologically so that they can be readily referred to?

A. Each year is in a small sack by itself in the large one.

Q. So counsel can examine them readily if they wish to?

A. Yes sir.

Cross-examination:

Mr. Critchlow: I offer in evidence the page headed "Rock Drills" and the page next before that which is headed "Alliance First Class."

The Court: Can it be removed?

Mr. Critchlow: Oh yes, they are easily removable.

Received in evidence and marked Exhibits 96 and 97.

Exhibit 96 reads as follows:

309 "Alliance First Class, June 1st to Dec. 31st, 1916. Crude lots 43-68-73-84 part of 80-298.909 tons. Per ton \$38.80

Au.	Ag.	Pb.
.025	17.81	28.6

Tramway costs 1916-\$9,331.93

Cost per ton of ore 0.328.*

Tons of ore shipped 28,406."

(In lead pencil as follows:)

"Milling .91 Tram Smp. (?) .328=1.258"

(In typewriting as follows:)

"Value per ton of ore shipped from the different sections:

Skiddo	\$89.04
% 5-7- & 900 levels	50.09
Also hanging W. stope 1300. Section	49.49
O'Brien stopes	43.86
Alliance	38.80
Average Crude	\$52.17
" Cons.	36.84"

(In pencil as follows:)

Rates ore production 1913-1914-15-16-30.02 to 1.

Production Alliance to all the mine 4.6%.

\$1.344 213.95

All 62,255.86==to 4.6%."

Exhibit 97 reads as follows:

(The typewritten part of Exhibit 97 is in words and figures as follows, to-wit:)

Rock Drills.

C #10 & C110 Unmounted	\$185.00
B. C. R. 430 Jackhammers	100.00"

(In pencil as follows:)

Silver Hill shaft 673 cost	150.80
----------------------------------	--------

Wt. of mine cars for following years:

	2nd class.	1st class.
1913	1527 #	2131 #
1914	1163 #	2009 #
1915	1523 #	2098 #
310 1916	1418 #	2381 #
Average	1408 #	2155 #

Dead work cost	1913	13.28	
" " "	1914	16.78	1.99
	1915	12.19	2.43
	1916	16.48	2.79

Average \$14.92

Average Deg. concentration May, 1912, to 1916 5.75 into 1.

Costs for milling, sampling and tramway \$1.8536

Scholefield .....	.91	Milling.
Tramming—Sampling .....	.328	
	<hr/>	
	1.238	

Silver Hill shaft first 105 in. Aug. Sept. Oct. Nov. 1912—

	\$64.96
1913-117'	113.71
From then on 656' cost	150.80"

On Exhibit 96 where you see a typewritten memorandum "Alliance First Class June 1 to December 31, 1916," that means just what it states, Alliance first class.

Q. That is from the Elephant stopes?

A. No. That's from the 700 and the 900; not from the Elephant stopes; not from the 600 level.

I did keep a separate account as you see of the ores that came from the 700 level and the 900 level of the Alliance tunnel in 1916 from June 1st to December 31st, 1916. We were not working any of the 600 stopes between the dates mentioned there, June 1st to December 31st, 1916.

Redirect examination of Mr. Humes:

Calling attention to page marked Exhibit 96, headed "Alliance First Class, June 1st to December 31st, 1916," that ore was taken outside the Conkling ground, months after we had quit work in the Conkling.

Q. Have you any knowledge, Mr. Humes, as to whether or not the ore cars, whether first or second class, that were being trammed to the Silver King shaft and thence hoisted to the surface, were or were not filled full?

A. No, they never were. Some of our ore is too heavy; it carries so much iron it adds to the load and the cars won't carry it, that is the first class; but the mill ore, I have tried to make them load those cars up full, but they would not be full when they got to the 311 shaft. The cars we took from the Alliance side were loaded from the ore bin near the Silver Hill shaft. They were trammed to the Silver King shaft on the 500 level, and thence they were sent to the surface. I have seen the cars frequently stand at the King shaft ready to be sent up. Some of them were just about three-fourths full. A few of them would be up to the level of the top of the car and some were full. The Silver King cars were used on the Alliance side. We didn't have sufficient cars to handle the rock from the Alliance in the Alliance cars alone.

Recross-examination of Mr. Humes:

The 43 by 28 by 24 inches were what we called the Silver King cars. The weights that I have given as the average weight of first class and of second class for the different years 1913 to 1916 inclusive, were the average from the entire Silver King mine; not an average from the Alliance side.

Redirect examination:

We did not load the cars full on the King side any more than we did on the Alliance side, either the first or second class. I never weighed a car of first class or second class that came from the Alliance or that came from the Silver King either. I have said that one reason for not loading the cars full was to protect the track, but there was another reason also. The structural weakness of the running gears of the cars, the wheels and the frame, both of the Silver King and of the Alliance cars. Then the shift bosses had a reason for not loading them full. If the cars were loaded full, either first class or second class, the ore would spill over the edge of the car. The loader knows if it slops over, the rock gets on the rails and there's a wreck. * * *

Further cross-examination of Mr. James Humes:

The ore referred to in Exhibit 96, "Alliance First Class June 1st to December 31st, 1916, crude lots 43, 68, 73 and part of 80 and so forth, were shipped separately. That's crude ores as I have stated, mostly from the 700 level outside of the Conkling ground. Some of our ores in the King ran high in copper. This ore on the Alliance side didn't run any copper; that was one of my chief reasons for shipping them separate. When I determined to ship the ore from the 700 separately, I didn't run the ore from the Conkling ground separately simply because I wasn't mining ore from the Conkling ground at that time.

312 JOHN W. CHRISTY, produced on behalf of the defendant, testified as follows:

My name is John W. Christy. I am the clerk of this court. In the month of June, 1908 I was acting official reporter of this court. I have referred to my notes of the 29th of June, 1908, they read as follows:

"29th of June, Treweek vs. Silver King Coalition Mines Company.

"Mr. Dickson: Judge Hall and I have agreed upon an order of survey, which will be satisfactory and I will stipulate that everything that they ask for in that order shall be granted. I want, however, an opportunity to talk to Judge Hall about a counter stipulation and orders made and entered, and if they will consent that the order be entered——

"The Court: It will be postponed until tomorrow so as to——

"Mr. Hall: I suppose the statement made by Judge Dickson that the order on the stipulation will be in the way of motion and affidavits—I understand they have no objection to granting what we ask for.

"Mr. Dickson: We have not, and if we have any property in the neighborhood they want to go into, we will give that privilege to go in and examine it.

"The Court: Then you can draw an order that is mutually agreeable and present it in the morning and I will sign it."

(Witness, continuing:) "June 30th, Mr. Hall: We have agreed upon an order, Mr. Dickson and I, and I submit it to the court:

"The Court: You say this is agreed to?

"Mr. Dickson: Yes, sir, we agree to that.

"The Court: Let the order be made then."

FRANK ANDERSON, produced on behalf of the defendant, testified as follows:

My full name is Frank Anderson. I am a mining engineer of many years' experience. Was first employed by Mr. Treweek in connection with the Conkling properties September, 1908. The surveys I made after that date are on the following dates: September 11th to October 3, 1908.

313 Next, November 12, to November 17, 1908.

Next, November 8 to November 20, 1909.

Next, January 16, to January 24, 1912.

These surveys were by virtue of the order granted by the Court June 30, 1908. The survey was continuous between the 16th and 24th of January 1912. That was all for Mr. Treweek.

Then I was out April 12, to 26th 1916, with Mr. Brooks on the joint survey. That was all the surveying I did in this ground.

Q. What, if any objection or opposition, was made to your making the survey in there, any time you wanted to?

A. None.

Q. You could have surveyed as you understand, monthly, weekly, or whenever you wished?

A. Yes, sir.

Q. So far as the defendant was concerned?

A. Yes, sir.

(No cross-examination.)

J. B. SCHOLEFIELD, recalled by the defendant, testified as follows:

(Thereupon it was stipulated that the shift bosses' book for November, 1913, shows that there came from the Elephant stope in the Conkling ground in the month fifty cars of first class, sixty-one cars of second class and twenty-four cars waste and that it came from the Tool stope, and that the record for that month has been tabulated by Mr. Scholefield and as shown by Exhibit 9a, which is introduced in evidence.)

Mr. Critchlow: We will agree further that we have examined the shift bosses' books for September, 1914, and that it shows no account of any ores except from the 600 level and that is all in the tabulation. (Thereupon exhibits 94 and 94-A were marked by the reporter.)

THOMAS KEARNS recalled by the defendant, testified as follows:

The first interest I acquired of any kind whatever in the Belmont property shown upon the map Exhibit 85, was in June 1907,
 314 which was the date of the Rohlfing option to me, I had nothing to do with Mr. Rohlfing getting the option. I got the assignment of the option through Mr. Ellis and Mr. McGurrian, the attorneys. After I had the option assigned to me I had the deed made direct to the Silver King Coalition Mines Company. I think, however, the assignment was made directly to me.

It appears in the testimony there were four lots of crude ore shipped from the Kearns-Keith property and two lots of concentrates. That ore, I know, came from the so-called Elephant stope.

At the time we were arranging the consolidation of these various mining companies into a new company, viz: the present defendant, Silver King Coalition Mining Company, the Kearns-Keith Mining Company, one of the constituent companies that owned this property in which the Elephant stope was located, was in debt somewhat to the Silver King Company, another of the constituent companies. I was president of the Kearns-Keith Company and I instructed my superintendent, Mr. Dailey, to make every effort he could in the best of the ore to take out enough to pay the indebtedness that the Kearns-Keith owed the Silver King while it was in the Kearns-Keith ownership, and the reason the ore was taken out and piled into drifts was to avoid taking it out of the long tunnel down the mountain and up again. We piled it there awaiting the completion of the cross-cut that was being driven from the Alliance to the Silver King shaft, intending to deliver it to the shaft through that route.

This ore was afterward shipped under my directions as president of the Kearns-Keith Company and sold by the Kearns-Keith Company.

Before I acquired the option on the Belmont property lying immediately west of the west end line of the Conkling, I gave specific directions to Mr. Dailey to be careful not to mine beyond the west line of the Conkling and told him that we did not own the property west of that line.

Of course, I did not want to develop ore in the Belmont ground when I did not own it. I wanted to acquire it but I didn't want to develop it until I had acquired it. I did tell my foreman to put his own men in there to work and to keep quiet about the developments near the Belmont property.

Cross-examination of Mr. Kearns:

When I told Mr. Dailey about not running into the Belmont ground, I didn't show even where the line was, I left
 315 that to my engineer and the superintendent had the right to call on the engineer to instruct him. I thought everything

west of the west end of the Conkling was Belmont ground, and it was. While the work was going on in what I considered the Conkling ground, I told my superintendent to put some good men in there that would not talk in the streets about it, but the co-owners in the Conkling ground were never refused admission. They had permission with their engineers to come in and out of there at will whenever they asked for it.

I always admitted the owners and their engineers whenever they requested. They went in and out at will. I did not keep the work in the Elephant stope a secret. I didn't publish it in the papers, but I admitted my co-owners whenever they requested. I don't know the date of their first request but they were never denied the privilege, not when they came to me to let them in.

I have read the letters of December 19, 1907, and of January 2, 1908. I never understood after we bought the Belmont ground that Treweek and Birch had any interest in this 135 foot strip. It never occurred to me that we did not own it until the Circuit Court of Appeals reversed Judge Marshall's decision. They were denied admission to the 135 foot strip but not as to anything they had any ownership in. I never had any idea that we would ever have to account for any ore in that 135 foot strip. We never kept any account of the ore that came out east of the red line, marking the westerly line of the Conkling according to the stakes on the ground, but that was not done by my instruction, and therefore I gave no instruction as to keeping an account or not keeping an account of it. The ore that I told them to take out to pay the debt of the Kearns-Keith Company was in the so-called Elephant stope, the 135 foot strip.

I acquired the Belmont ground—it was then that I instructed them not to take any ore East of the line, that is to say, East of the west end line of the Conkling, that was the time I gave that instruction. Before I got the title my instruction was not to run into the Belmont ground.

The suit was commenced as I understand it in January, 1908, but I did not think, even after the suit was entered that there was any question about it. I thought I owned this ore in the 135 foot strip, both by right of purchase of the ground and because of the apex of the vein. I was so advised by some of the ablest mining men in the

country as well as by my attorneys, that there was no question
316 but what our title on both grounds would stand. I do not know that the letter, Exhibit 46, was brought to my personal attention but it may be admitted that it was brought to the attention of the defendant company, but I cannot say that I even answered it. I do not remember. But I didn't think they had any right to any information or account as to ore taken in this 135 foot strip and I didn't keep any account of it. It is true I did not keep any account either of what had been taken east of the red line in the Conkling ground, but we admitted our co-owners into this ground with the surveyors and they could readily see what had been taken. They could see for themselves if there was any damage.

I never intended to pay extra wages to the men working down there after I got title to the Belmont ground. I may not have stopped on

the day I got title but I did not pay any after that month; it was not my purpose to do so.

(Thereupon Exhibit 95 was introduced in evidence being a deed from the Belmont Mining Company to Thomas Kearns.)

Redirect examination of Mr. Kearns:

While the Elephant and 600 stopes were being worked I was Vice-President and general manager of the Coalition Company, the defendant, and I visited the workings probably not more than seven or eight times a year. That was the extent of my personal knowledge and personal observation but upon some of these visits I saw the ground crowding the drifts together, closing them up so cars could not pass through. It was heavy swelling ground.

DAVID KEITH, produced on behalf of the defendant testified as follows:

During the time the Elephant stope country was being worked and afterwards the six and seven hundred stopes on the Alliance side, I was probably in there once a month. Mr. Kearns was President of the Kearns-Keith Company but I was Vice-President. Upon the formation of the Coalition Company I was made President of that company and Mr. Kearns was Vice-President and General Manager.

Cross-examination of Mr. Keith:

Prior to the time we acquired title to the 135 foot strip we did not take any ore out from the Elephant stope, except such as was found in running the prospect drifts, little bunches.

317 C. P. BROOKS, recalled by the plaintiff, testified as follows:

Q. Now I don't know whether I have down the exact measurements of the 600 stopes; the total that are inside and outside of the Conkling ground—can you follow me if I check them off?

A. If I have them here and I think I have; I have the stoping by years.

Q. I don't care about it by years. The 600 Top stope 36,743 cubic feet. That is the total inside without reference to the years it was taken out.

600 middle stope 16,692 cubic feet.

704 Raise stope 1,815 cubic feet.

700 Drift stope 3,402, that was in the year 1915;

making the total inside the Conkling ground 58,652 cubic feet. I measured the 704 Drift stope up in 1915.

Q. What is the total then of cubic feet of these stopes below the 500 which lie outside of the Conkling ground? * * * Can you give us the total?

— I can add it up here. According to my figures 141,923.

Q. Now, Mr. Brooks, as I understand it, in order to get at the right amount of ore that came out of the 600 stopes, that is to say, the 600 Top stope, the 600 middle stope, and the 600 stope, if any, the only way is to apportion the ore in order to get what is inside and outside of the Conkling ground?

A. Of course, I couldn't tell from my surveys exactly when they crossed the line, but the absolute amount that is inside and outside of the lines I have given you according to my figures; I didn't apportion anything.

(Witness, continuing:) I have testified as to samples which I took to make the tests as to the space occupied by a ton of ore. I will say that I took those samples from the ore in place as it stands there at the present time, and as near as I could, represented all the ore that was left there in that stope. Mr. O'Neill was with me but I had the final say, and it represents my judgment as to the ore. Samples 1, 2, 3 and 4, represent my judgment as to the first class ore on an average. I intended to pick the samples showing as good as any ore I could find in the places I was digging for the ore.

Q. Did you understand your samples to represent first class ore which was mined out of the Elephant stope?

A. Not all of them, I intended some of them—I picked, I could see by my eye they were first class, that it was first class ore; some of them it wasn't so plain underground and it wasn't
318 until the assay was made that I found the higher values in them. I know of one particular sample I thought was mill ore and it was much higher. I think that was No. 2.

Q. I was going to ask you particularly, did you select No. 1, when you selected it underground and before you made your experiment, as a representative of first class ore from the Elephant stope?

A. Yes, sir.

Q. Did you select No. 2 at the time you took it underground as a representative of first class ore from the Elephant stope, mined from the Elephant stope?

A. As I took it from underground, I will say no, I did not; I thought I was picking a good grade of milling ore or what I call a good grade of milling ore but the assay showed it is really shipping ore.

Q. Do you now regard it as milling or shipping ore?

A. I should say No. 2 is shipping ore.

Q. 18.9 per cent lead and 10 ounces of silver.

A. Yes, the prices at the present time.

Q. Did you take sample No. 3 as a representative of first class or shipping ore at the time you took it or as milling ore?

A. I have forgotten what the assay—

Q. Independently of the assay, you know where you took it, don't you?

A. Yes, I know where I took it.

Q. When you took that ore there—

A. I took it as intending it to be first class ore.

Q. Now after you have it assayed, do you regard it as first class ore?

A. I think it is if my recollection of the assay is right.

Q. It goes 19.8 per cent lead?

A. Yes.

Q. When you took No. 4 underground, did you take it as representative of first class ore or as mill ore?

A. I took it is representative of first class ore at that place.

Q. At that place?

A. Yes.

Q. But did it represent the average of all the first class ore taken in your judgment?

A. I should say it was a fair representative of a large quantity of first class ore that came out of there, I don't say all of it, probably, but it was a fair representative of a large quantity of first class ore.

Q. Did you take No. 5 as a representative of first class ore or as mill ore?

A. I took it as mill ore.

Q. Did you try to take any piece of ore as representative of first class ore which was as good as the very best that could be found from that stope?

A. Yes, I think our samples were the very best we could find when we were taking first class ore, we took it out of the vein and
319 took the best part of the vein, carefully selecting the solid part of the vein so as not to get any more waste in it.

Q. But you wouldn't say, Mr. Brooks, that these samples or any of them represent the best of the ore that came out of that stope, would you?

A. There might be places in that stope that would be better than that; I wouldn't say there was not.

Q. In other words, for ought that you know there were places in that stope in which you could find the first class ore, which went better than any sample that you have got here?

A. There is no doubt there might be places that you could find small quantities of it.

Q. Why do you say small quantities of it?

A. Because my general knowledge of the stope, I don't think there was any large quantities of extremely high grade ore.

Q. You have given your determination here as to the cubic contents of the volume, rather, the volume of those various specimens of ore and you have figured them down to a dry state after figuring out the moisture?

A. Yes, sir.

Q. Do those figures represent your judgment as to the volume of first class ore and second class ore?

A. Yes, sir.

Q. They are not only the results which you obtained by your method but represent your judgment as to what the volume is?

A. I should say they would represent my judgment, yes, sir.

Q. Although two of them were taken in the mine as second class ore?

A. Two of them as they appeared to be when we took them, seemed to be low grade.

Q. And the number five is the only one then that represents the volume of second class ore?

A. Yes, sir.

Q. That goes 11.17 cubic feet to the ton?

A. Yes, sir.

Q. Did you regard it as a proper way of arriving at that, take one specimen only of second class?

A. No, I thought I had taken more, when I got down to get the assays, I couldn't tell until I got the assays and I found they were better grade of ore than I had sampled them with my eye.

Q. Did you suggest to the defendant company the figures to be taken as the volume of the first class ore or was that entirely by counsel?

A. That was by counsel.

Q. And I assume you have stated to counsel the results of those as soon as you got them?

A. Yes, sir.

320 Q. Now, Mr. Brooks, in order that I may arrive at this in a little better way, I want to see if I can put down these figures so we cannot misunderstand them. Inside the Conkling claim we have 600 top, 22,148 for 1915.

Mr. Dickson: This is all in the record isn't it?

By Mr. Critchlow:

Q. 600 middle, 16,692.

600 top, 14,595 for 1916.

704 raise stope for 1916, 1815?

A. Yes, sir.

Q. Mawing a total of 55,250. Is there anything more that came out through the 600 that you know of?

A. No.

Q. Now outside the Conkling you have given it—in 1914, the 600 stopes, 60,000 cubic feet, is that correct?

A. 1914, 600 stope, outside the Conkling line, 60,000.

Q. And 600 middle in 1915, 51,820, is that right?

A. 51,820.

Q. 1915, the 600 stope, is that right?

A. 4,601.

Q. In 1915, the 600 middle stope is 51,820; in 1916, the 600 top stope, 10,868, is that right?

A. Yes, sir.

Q. In 1916, the 704 raise stope 894 feet?

A. 984 feet.

Q. Were there any other stopes that came out through the 600 level the material of which came out from the 600 middle, as far as you know?

A. No.

Q. The total would be 183,523 of those stopes both in and out of the Conkling that came out of the 600 level?

A. If they are added rightly, that is right.

Redirect-examination of Mr. Brooks:

The distance from the ore bin at the shaft to the 500 level as near as I can scale it is 9,500 feet. The ore has been hauled out by electric motors as far back as 1913 and 1914. I have observed the cars when they have been hauling ore and have ridden on the trolley that pulled the cars. The track was pretty rough in places. I have often seen the cars sent up the King shaft from the 500 level, a great many times, and have seen them there ready to be sent up. I don't remember ever having seen a car loaded full that was ready to be sent up. They would fall short of being full from four to six inches.

Recross-examination of Mr. Brooks:

On November 3, 1906, according to the notes of my survey the Shay drift was over the Ossien Raise. The work then necessary to be done to make a connection between the Shay drift and the Ossien Raise was, of course, to extend the raise up to the con-
321 nection of the drift. I have not the elevation here but my recollection is that it would have been necessary to raise thirty or thirty-five feet more.

I have figured out how much space the ore in Exhibit 48, to have come out through the 600 foot level from these stopes ought to occupy in place. On certain assumptions it ought to occupy about 256,000 cubic feet. Of course, you could not get that into 146,389 cubic feet but I do not think that the cubical contents of a ton of ore should be modified, and I know of no stopes except such as are shown on the maps. In stating that the ore shown in Exhibit 48, on certain assumptions should occupy 256,169 cubic feet, I took the weight of a first class car of ore at a ton and of a second class car 8/10ths of a ton and assumed the cars to be as full as they would hold.

ARTHUR McDONALD, produced on behalf of the defendant, recalled testified as follows:

I have heretofore testified about the ores that were sent from the bin at the Silver Hill shaft to the King shaft at the 500 level. I, of course, saw the loaded cars before they started out. There was not any of those cars filled full because in going out to the Alliance dump or to the Silver King shaft there were from eight to eleven turns and some of them very sharp, in the track. The cars were chained together leaving a space open to make these sharp turns. To make the turns you would have to slow down the motor and then we would give them a bump. If those cars were loaded it would shoot the ore clean over the cars into the tunnel, scattering the ore on the track so you would hardly ever get a train out of there. You could not get a train out if you loaded the cars full. The second class cars of ore

would be filled higher in the center than at the edges or front or back. That is the way it was loaded from the chute. The chute was narrower than the car and we would contrive for the ore to hit the center of the car so when piled in the car it would be highest in the center. The ore would go within three or four inches of the top. We were more careful with the first class to load that so none of it would be lost.

Cross-examination of Mr. McDonald:

The superintendent of the property at the time of my employment there saw that the cars were not fully loaded, every time he came into the tunnel. The cars we loaded ore in were steel cars two feet in depth. We did not load the cars to the top, we avoided doing so in order to prevent the falling or jarring of ore to the

322 tracks and thus the wrecking or the derailing of the cars. There were a good many turns and a great deal of bumping.

This is not my explanation of getting the ore back into the cavities at all. I have no knowledge of the figures. I am just explaining to you what the conditions were, how the cars were loaded. I would say that when the cars got to the bins they would fall short of being full from three to four inches, because the vibration would naturally settle the ore.

CORNELIUS J. O'NEILL, recalled by the defendant, testified as follows:

I have heretofore testified in the case and told you when I was foreman on the Alliance side where these stopes in question are located, and about the tramming of the ore from the Silver Hill shaft to the Silver King shaft. The cars were never filled to the top, especially first class. In addition to the danger of the ore falling out of the cars, we were always afraid of putting too much weight on the ties. It would break them down. Oh, yes, we had wrecks sometimes from ore getting on the track. We tried to avoid that by care in loading and keeping the cars from being full. Frequently when the cars arrived at the King shaft they would fall short of being full by six or eight inches as a result of the settling of the ore on the journey.

Cross-examination of Mr. O'Neill:

The first class cars especially were not loaded full. I tried to get the second class cars full but they were not full. I could not get them loaded full unless I stayed right there.

Q. Why couldn't you get them loaded full?

A. The men wanted to get out as many cars as possible, get as big a tally as possible; that was one reason. The other reason was in filling them up the motorman wouldn't load them unless I stayed right with them.

I did try to have them loaded full, the second class but not the first class cars. It was down grade in that tunnel as the ore was taken to the Silver King shaft and the ore had a tendency to pitch forward to the front of the car and pile up there. The cars would go out at a speed of sixty to seventy miles an hour.

323 DANIEL McCANN, recalled by the defendant, testified as follows:

I have testified to the period of time I was shift boss on the Alliance side. I observed the cars as they would be taken from that ore bin at the Silver Hill shaft or that came from the 600, and that was sent up to the 500 and over to the Silver King shaft and the cars were never loaded full—unless once in a while a rock would get stuck in the door of the chute. We had a horse in there some of the time. He would have to trot sometimes to keep out of the way of the cars going down the grade. Neither first or second class ore were loaded full but there might be a little more of second class. We did have instructions from Mr. O'Neill, the foreman, but we didn't always go by instructions.

Q. You did not?

A. No.

Q. It was your duty, wasn't it?

A. Yes, sir.

Q. You had no motive except to do your duty, did you?

A. He wanted lots of rock out; I tried to get the largest number of cars I could.

Q. He wanted all the rock moved as fast as possible, didn't he?

A. Yes.

Q. You would move rock faster by filling the cars than by sending them out part empty?

A. That wouldn't count for me that way though.

Q. Just what do you mean by wouldn't count for you?

A. Wanted to know next day what tally I got out; sometimes I could make five out of three; he more count for me.

Q. You were putting it over on Con O'Neill and the company, were you?

A. I guess I was, I don't know who I was putting it over on.

* * * I tried to make all the cars I could.

It was not only on account of the fact that ore might fall on the track that cars were not loaded full. I tried to get all the cars I could, then the motorman would always see that he didn't load them full so as to cause him trouble, so he would never try to load them full.

FRANK HANSEN, produced on behalf of the defendants, testified as follows:

My full name is Frank J. Hansen. I am an assayer and a chemist and I am in the employ of the defendant company. I have been in its employ since October 1, 1914.

324 I know what is meant by mill heads and mill tails. As assayer it was my duty to make daily assays of the heads and tails that came from the mill and I did so every day. I have here the assay books. These books contain the daily records of said assays since I became assayer down to the present time, or rather down to August 1916.

Mr. Critchlow: In view of the stipulations we have, what is the materiality of this?

Mr. Dickson: I want to show the number of tons of crude ore that went into the mill. Of course, I am not offering this to affect our stipulation as to the ratio of concentration nor the cost per ton, but that stipulation as to ratio of concentration would not preclude us on this issue you have raised by your ingenious argument yesterday as to what the fact was as to the number of tons of crude ore that went into the mill. * * *

(Exhibit 98 marked by the reporter.)

Mr. Dickson: I will offer only that part of the record commencing with October 1, 1914.

(Exhibit 99 marked by the reporter.)

(Witness, continuing:) I made assays of the heads and tails every day and entered the result daily in these books.

Mr. Dickson: They would only be material for this reason Mr. Critchlow, the mill man taking those books, the assay of heads and tails and the number of tons of concentrates that were shipped monthly or yearly, which [every] way you want it, and the value per ton of the concentrates, can ascertain therefrom how many tons of crude mill ore went into the mill for any day or any period.

WILLIAM F. DEVLIN, produced by the defendant, testified as follows:

I am a mill man. I am now mill superintendent for the defendant. I have — since April 10, 1916. I was experimental man in the mill prior to that, beginning that employment on September 7, 1915. Gib Mahan was my predecessor. He is in Wallace, Idaho now. His predecessor was William Buck. He is in Canada. I know Mahan's handwriting.

Q. Mr. Devlin, can you by taking the assays of mill heads, daily assays, and daily assays of mill tails and then the shipments of concentrates, and the value per ton of the concentrates, ascertain therefrom how many tons of crude ore went into the mill for any given period?

325 A. Yes, sir. I have the mill sheets here from which that can be more readily ascertained than by a detailed examination.

In order to explain for the month of April the number of tons of concentrates, and the number of tons of crude ore that went into the

mill, I have got to get a composite sample from my assayer of the mill lot run for whatever amount of days it may be of the heads and tails and I get returns of ore concentration from our smelter settlements of the value and dry weight, and by using an assay formula, deduct the tails from the cons.

Q. What is the formula?

A. Concentrates minus tails, divided by heads, minus tails, will give you the ratio of concentration.

Q. The assay of the heads would give you the gross value of the crude ore?

A. That would give me the ratio.

Q. The assay of the heads taken daily would give you the gross value of all metals contained in the crude ore?

A. Yes, sir.

Q. The daily assay of the tails would enable you to determine how much of the values of the respective metals had been lost in concentration?

A. Yes, sir.

Q. Then having the number of tons of concentrates produced in any given period and the value per ton of the dry concentrates, you would know how many tons of crude ore must have gone into the mill?

A. Yes, sir.

Q. Take the month of April, 1916, what was the ratio of concentration, how many tons of crude ore went through the mill?

A. The ratio is 5.8 into 1. There was 1,539.3 tons of crude ore. The shipment of concentrates was 303.02 tons of concentrates, dry weight.

(Witness, continuing:) Mr. Mahan preceded me but I was during all his time his assistant. I know his handwriting but his record is all in my handwriting. All but one or two summaries. I did all of his office work. Before that Buck had done the work under him.

Q. Can you from this sheet determine the number of tons of crude ore that went into the mill in August, 1915?

A. Yes, sir.

Q. The ratio of concentration?

A. Yes, sir.

Q. What was the ratio of concentration for that month?

A. That was the carbonate ore; it was 9.29.

326 Q. What was the number of tons of crude ore that went in the mill.

A. Dry tons 1520.260, and the product in dry concentrates was 163.504.

(Witness, continuing:) I commenced as assistant mill man on September 7, 1915. Mr. Buck I said was in Canada. His handwriting commences in September, 1913 and continues until August, 1915. Mahan succeeded him. I am familiar with Mr. Mahan's handwriting. I have identified his handwriting in the books I have before me here and also Mr. Buck's handwriting. I have from these

books made a computation of the number of tons of mill ore that went through the mill for the year 1914 and the number of tons and ratio of concentration in 1914 is as follows: There was milled 59,907.299 tons; that was crude ore; and there was shipped from the mill 12,119.313 tons of concentrates, dry weight;—ratio of concentration 4.9. That was the output of mill ore from the entire mine during that year 1914.

The number of tons of crude ore that went from the entire mine in 1915 equals 45,734.29 tons crude mill ore; 8,064.955 tons of concentrates shipped;—ratio of concentration was 5.6.

For the first three months of 1916 the books show 6.775 tons of crude ore and 1,142 tons of mill concentrates shipped in the same period;—ratio about 5.9 into one.

These mill sheets were kept in the same way by Buck and Mahon, as I have kept them since.

Cross-examination of Mr. Devlin:

It takes a fewer tons of sulphide ores to make a ton of concentrates than it does of carbonate ore. In the testimony I have given I have not made any distinction. I have considered it all simply as ore, not knowing how much was carbonate and how much was sulphide. I have determined the entire tonnage that went through the mill from the entire mine for the periods mentioned. I used the assay book of Mr. Hansen for the months of January and February, 1916, together with the returns from the smelter, together with the daily report from the assayer. The assayer sent me a daily report. I don't believe I can find the report now. It is just a sheet of paper, an assay sheet but here are the figures for the report. The report contained mill heads, oz. of gold, silver and lead. I used these reports for January and February that Mr. Hansen sent in, and also the smelter returns which are in evidence here.

327. I have given you the formula for determining the ratio, viz: Concentrates minus tails divided by heads minus tails. To get then the number of dry tons of ore that went into the mill, you take the ratio of concentration times the dry tonnage of settlement from the smelter gives me the crude ore into the mill. I would not say these are uncertain quantities.

To get the ratio of concentration I have to have the tonnage shipped. That is the tonnage of concentrates shipped.

Redirect examination of Mr. Devlin:

The smelter settlement sheets for any lot of concentrates shipped would show just the number of dry tons of concentrates which had been produced from the mill run which made up the shipment. Whatever may have been the moisture in the crude ore there would be no moisture in the concentrates.

Q. By dry tonnage there, the moisture, whatever it was, would have been driven off. Now as I understand your formula or the method by which you arrived at the number of crude tons that went

through the mill to make up a given lot of concentrates, and the ratio of concentration, is this, you have, according to the assays, assuming there was a mistake of one per cent or any mistake on the heads showing just what the percentage of lead was in the crude ore, the percentage of silver, what amount of gold, if any, or any other metal, that had any value; then you have an assay, a similar assay of the tails showing just what percentage of each of the metals having any value had been lost in the process of milling; then you have the number of dry tons of concentrates and you have the value per ton that has been recovered in the concentrates. From that it is a simple matter, is it not, to determine just how many tons of crude ore must have gone into the mill?

A. Yes, sir.

Q. And the ratio of concentration follows?

A. Yes.

(Witness, continuing:) Mr. Hansen furnished daily sheets showing the assay of the heads and assay of the tails and the record of that was preserved.

Cross-examination of Mr. Devlin:

Q. Going back a moment to this same record of the monthly mill report for January and February, 1916, that record shows that
328 1,248 dry tons of carbonate ore made 152 tons of concentrates and that 1,064 tons of sulphide ore made 212 tons of concentrates, is that correct?

A. Yes, sir.

Q. What did you determine was the average ratio of concentration for these years that you have given?

A. For 1914 the ratio of concentration, 4.9; 1915, ratio of concentration 5.6; 1916, ratio of concentration 5.9.

Redirect examination of Mr. Devlin:

Q. There was some ore treated separately that came from the Alliance side in 1916, from June 1. I will have you show me that lot that was taken separately, show what the ratio of concentration was of ore that came from the 600 and 700 stopes outside the Conkling ground?

Mr. Critchlow: What was your statement about that, that it came from where?

Mr. Dickson: Mr. Humes testified in June, 1916, he treated ore separately from the 6, 7 and 900 stopes.

Q. In May and June, 1916; how many tons of crude ore went into making up that lot of concentrates?

A. 1107.22 tons produced 227.825 tons of concentrates; 4.8 into one. Take for the next two months June and July, crude ore 990 tons; shipment of concentrates 232 tons, ratio 4.2 into one.

July 1, 270 tons crude, 264 tons concentrates, ratio 4.7 into one.

August 1,283 tons crude ore; concentrates 273 tons; ratio 4.7 into one.

September lot 26, ratio 5.3; crude ore 1,389; concentrates 243.

November 1916, 3.8.

Q. I see each of these lots are marked Alliance sulphide?

A. Yes, sir. In November there were 1,267 tons crude ore; concentrates 329 tons.

December 1916, Alliance ore, Lot 33,—sulphide ore—crude ore 1,267 tons, concentrates 329 tons, ratio of concentration 3.81 into one.

Mr. Dickson: Give the lot numbers on back.

—, November?

A. Lot 32.

Q. September?

A. Alliance 26.

Q. August?

A. Lot 23.

329 Q. July?

A. Lot 19.

Q. June?

A. Alliance Lot 16. Lot 14 May and June.

Recross-examination of Mr. Devlin:

Q. When did you start to get these books up to bring them down here?

A. That book has been down here since the middle of the month. I got it sent down after the 10th when I was down here. It has been in the office ever since.

Q. Did you call attention to Mr. Humes, or anybody else to the fact that Alliance ore was kept separate in running through the mill?

A. Mr. Humes knew it, I didn't call his attention to it. It was he who ordered it through there. He gave the order it should go through separately when I took charge in 1916 but I think it was in May.

FRANK J. HANSON, recalled, testified as follows:

When I made my daily assay of heads and tails of the ore that was going through the mill, I added it the same day in these books. It is in the books of the same day it was run through the mill. The assays are made the day after it runs through the mills. I gave Mr. Devlin a certificate every day of his heads and tails. It was a correct certificate according to my assays.

Recross-examination of Mr. Hanson:

I did the same with William Buck and Gib Mahan as with Mr. Devlin. The assay was the result of samples brought to me by the mill men.

(At this point it was admitted by the plaintiff that the Articles of Incorporation of the Silver King Coalition Mines Company were entered into on the 17th day of May, 1907, and the corporation organized on the 20th day of May, 1907.)

J. B. SCHOLEFIELD, recalled, testified as follows:

I have ascertained from the books of the defendant the earnings received by the defendant and its predecessors from the sale of water from the Alliance tunnel from 1900 to 1916, inclusive, as follows:

From 1900 to June 1, 1907, 18,391.55.

From June 1, 1907 to December 31, 1916, \$200.00 per month.

330 C. P. BROOKS, recalled by the defendant, testified as follows:

Calling attention to the map, Exhibit 2, I will state that I have computed the volume of the stopes shown thereon outside of the Conkling ground and I find it to be 74,310 cubic feet. I mean outside of the west end line of the Conkling. I am speaking of the west end line as called for in the patent. The west end line as established by the Court of Appeals.

F. J. HANSON, recalled, testified as follows:

Referring to Exhibit 99, the first column at the left, where the initials occur, J. H., or J. A. M., etc., these represent the names of the persons who either initialed the sample that I assayed, or brought it to me. The next column represents the number of the tag on the sample. These are in serial order kept by them. The next column ordinarily refers to the number of the level in the mine, and the next refers to the description on the tag. The next refers to the per cent of lead by my determination, and the next to the ounces of silver. This is uniformly as I kept it. I made the determinations of lead by fire assay, and never went beyond the first decimal point, the same with silver. In Book 99, the first date at which my assays occur in the book is October 1st. J. H. there refers to Mr. James Humes, the superintendent. A. Mac. to A. McDonald, the witness who has testified here.

The witness then identified as accurate certain entries in the assay book of defendant made by him between October 2, 1914 and August 28, 1915.

The record continues on after August 31, 1915, for some months in the same way. I do not know where the Hanauer ore came from.

Mr. Dickson: I will offer in evidence the smelting contract of the old Silver King Company and Silver King Coalition Company with American Smelting & Refining Company, and with Augustus Heinze, afterwards assigned to the American Smelting & Refining Company. I offer them only for this purpose, perhaps it will be conceded that under the contract which the old King Company had and afterwards the Silver King Coalition Company, had, the two running from sometime in 1904, until December 31, 1908, we not only received nothing for zinc from the ores but we were penalized fifty cents per

unit for all zinc above 8 per cent and under the contract which
 331 we have been operating under since the 1st of January, 1909,
 we are not penalized for zinc and we are not allowed any
 thing for zinc.

Mr. Critchlow: We shall want to make use of those contracts.

Mr. Dickson: All right then, I offer them in evidence. I first
 offer the contract between the Silver King Mining Company and the
 American Smelting & Refining Company dated this 19th day of
 September, 1903, which is for a period of five years from April 1,
 1904.

(Exhibit 104 marked by the reporter.)

The Court: Let it be received.

Mr. Dickson: Next the contract between the Silver King Coalition
 Mines Company and the American Smelting & Refining Company
 under date of the 14th of June, 1907.

(Exhibit 105 marked by the reporter.)

The Court: Let it be received.

Mr. Dickson: Next memorandum agreement under date of June
 14, 1907.

(Exhibit 106 marked by the reporter.)

The Court: It may be received.

Mr. Dickson: And finally a contract under date of May 21, 1907,
 between the Silver King Coalition Mines Company and F. Augustus
 Heinze together with assignment thereof by Heinze, made on the
 3rd day of July, 1907, to the American Smelting & Refining Com-
 pany, Exhibit 107 marked by the reporter.

The Court: Let it be received.

(Exhibits 104 to 107 inclusive, offered and received in evidence
 are in words and figures as follows, to-wit:

(Exhibit No. 104 is in words and figures as follows, to wit:)

Contract.

This Agreement, made and entered into this nineteenth day of
 September, A. D. 1903, by and between the Silver King Mining
 Company, a corporation of Utah, hereinafter called the "Mining
 Company," party of the first part, and the American Smelting &
 Refining Company, organized under the laws of the State of
 332 New Jersey, hereinafter called the "Smelting Company," the
 party of the second part, Witnesseth:

That for and in consideration of the sum of One Dollar (\$1.00)
 in lawful money of the United States paid by each of said parties
 to the other, the receipt of which is hereby acknowledged and other
 payments and mutual covenants, conditions and agreements herein
 contained, the parties hereto have agreed, and do agree, with each
 other as follows:

First. The Mining Company agrees to sell to the Smelting Company, its successors and assigns, the entire output of the crude ore and concentrates combined up to four thousand (4000) tons per month, with an option to the smelting company to accept the surplus, if any, for a period of five years from April 1st, 1904.

Second. The Smelting Company agrees to receive the above mentioned ore delivered in carload lots f. o. b. cars Park City, Utah, and to pay for the same in accordance with the following terms and conditions:

Payments.

Silver: Pay for 95 per cent of contents at the New York quotation on date of agreement of assay, as furnished by Messrs. Handy & Harman, to the Western Union Telegraph Co.

Gold: Pay for entire contents at \$19.00 per ounce.

Copper: Pay for the entire contents dry assay (wet assay less 1.3 units) at \$1.00 per unit. If copper contents exceed $2\frac{1}{2}$ per cent, dry assay (wet assay less 1.3 units) pay for entire contents, dry assay, at the Engineering & Mining Journal quotation for electrolytic cathodes for week preceding date of agreement of assay, less four cents per pound.

Lead: Pay for 90% of contents at 90 per cent of the American Smelting & Refining Company's actual sales price in New York for common desilverized lead in lots of 50 tons or more, for shipment within thirty days, for week preceding date of agreement of assay.

Treatment Charge: \$15.00 per net ton of two thousand pounds.

Zinc: 10% allowed free. For all zinc contained in excess of 10%, an addition shall be made to the working charge at the rate of fifty cents per ton for each per cent, of excess over 10%.

333 Sulphur: 6% allowed free. For all sulphur contained in excess of 6%, an addition shall be made to the working charge at the rate of 25 cents per ton for each per cent of excess over 6%.

Assays.

For the determination of the lead in the ore, a fire assay shall be made.

Copper shall be determined by the ordinary wet assay.

The assays shall be made by two assayers, one of whom shall be selected by the Mining Company and the other by the Smelting Company.

In case the assayers do not agree with- reasonable limits the assayers shall be required to repeat their work, and if the results are still unsatisfactory, then a third independent assayer, mutually agreed upon, shall act as umpire, and his determination of the value shall govern in settlement, provided same be between the results obtained by the assayers of the Mining Company and the Smelting Company.

Should the umpire results be higher than the highest or lower than the lowest, then the assays of the Mining Company or Smelting Company nearest the umpire shall govern in the settlement.

Full payment in cash shall be made by the Smelting Company for said ores, when the values have been agreed upon.

The American Smelting & Refining Company reserves the right to route or divert the ore and concentrates shipped under this contract.

In case of acts of nature, strikes of any kind affecting the operations of the contracting parties, fires, floods, shortage of cars, financial crises, wars, or insurrections or any cause whatsoever, which being beyond the control of the contracting parties or either of them, should make it a disability or serious hardship on the Mining Company to ship the ores herein contracted, or for the Smelting Company to receive, purchase and smelt such ores, the parties hereto shall be relieved from responsibility or claim for damages for failure to ship or receive same, but shipments and receipts shall be resumed as soon as the disabling cause is removed, and the period of any such interruption or interruptions shall be added to the term provided for in this contract.

This contract shall be binding upon and inure to the benefit of the successors and assigns of the respective parties hereto; and as 334 to the Mining Company, shall be deemed to be and considered as a covenant running with the land.

The Mining Company, in further consideration of the premises undertakes and agrees that, in the event that it shall sell, lease or otherwise dispose of all or any of its mining property producing ores covered by this contract, during the period covered by this agreement, it will cause its successors and assigns in interest in such mining property to assume, fulfill and carry out each, every and all of the covenants and agreements herein set forth to be kept and performed by the Mining Company.

This contract to be binding must first be duly authorized, approved and confirmed by the Executive Committee of the second party who, to evidence such authorization, approval and confirmation, shall cause this contract to be signed by the Secretary of such Committee.

In Witness Whereof, the parties hereunto set their hands the day and year first above mentioned.

[SEAL.]

SILVER KING MINING
COMPANY,
By DAVID KEITH,
Presl.

Witness:
W. G. LAMB.

AMERICAN SMELTING &
REFINING COMPANY,
By E. W. NASH,
President.

Attest:
EDWARD BIRCH,
Secretary.

I, W. E. Merriss, Assistant Secretary of the American Smelting and Refining Company, do hereby certify that the following is a full

and true copy of a resolution adopted on motion duly made and seconded, at a meeting of the Executive Committee of the said company, duly called and held at 71 Broadway, New York City, on the 23rd day of September, 1903, a quorum being present:

"Resolved, that the execution by President E. W. Nash on behalf of this company of a contract with the Silver King Mining Co. providing for the purchase of the output of crude ore and concentrates of the said company for a period of five years beginning April 1st, 1904, upon the terms and conditions specified therein, be, and 335 the same is, hereby ratified and confirmed."

[SEAL.]

W. E. MERRISS,
Assistant Secretary.

New York, September 23rd, 1903.

Exhibit 105 is in words and figures as follows, to-wit:

Contract.

This Agreement, Made and entered into this 14th day of June, A. D. 1907, by and between the Silver King Coalition Mines Company, (a corporation of Nevada), hereinafter called the "Mines Company," party of the first part; and the American Smelting & Refining Company, organized under the laws of the State of New Jersey, hereinafter called the "Smelting Company," the party of the second part, Witnesseth:

That for and in consideration of the sum of One Dollar in lawful money of the United States, paid by each of said parties to the other, the receipt of which is hereby acknowledged, and other payments and mutual covenants, conditions and agreements herein contained, the parties hereto have agreed and do agree, with each other as follows:

First. The Mines Company agrees to sell to the Smelting Company, its successors and assigns, its entire output of crude ore and concentrates combined, up to four thousand (4,000) tons per month (with an option to the Smelting Company to accept the surplus, if any), for a period beginning June 14, 1907, and ending Dec. 31, 1908.

Second. The Smelting Company agrees to receive the above mentioned ores delivered in carload lots f. o. b. cars Park City, Utah, and to pay for the same in accordance with the following terms and conditions:

Payments.

Silver: Pay for 95% of contents at the New York quotation on date of agreement of assay, as furnished by Messrs. Handy & Herman, to the Western Union Telegraph Co.

Gold: Pay for entire contents at \$19.00 per ounce.

Copper: Pay for the entire contents, dry assay (wet assay less 1.3

units) at \$1.00 per unit. If copper contents exceed $2\frac{1}{2}$ per cent, dry assay (wet assay less 1.3 units) pay for the entire contents, dry assay, at the Engineering & Mining Journal quotation for 336 electrolytic cathodes for week preceding date of agreement of assay, less four cents per pound.

Lead: Pay for 90% of contents at 90 per cent of the American Smelting & Refining Company's actual sales price in New York for common desilverized lead in lots of 50 tons date of agreement of assay.

Treatment Charge: \$15.00 per net ton of two thousand pounds.

Zinc: 20% allowed free. The zinc contents of the month's shipment shall be averaged and if this average is over 20% a penalty of 50 cents per ton shall be paid by the Mines Company for each per cent of zinc in excess of 20% upon the entire month's shipments.

Assays.

For the determination of the lead in the ores, a fire assay shall be made.

For the determination of the copper, the ordinary wet assay shall be made.

The assays shall be made by two assayers, one of whom shall be selected by the Mines Company, and the other by the Smelting Company.

In case the assayers do not agree within reasonable limits, the assayers shall be required to repeat their work and if the results are still unsatisfactory, then a third independent assayer, mutually agreed upon shall act as umpire, and his determination of the value shall govern in settlement, provided same be between the results obtained by the assayers of the Mines Company and the Smelting Company.

Should the umpire results be higher than the highest or lower than the lowest, then the assays of the Mines Company or Smelting Company nearest the umpire shall govern in the settlement.

Full payment in cash shall be made by the Smelting Company for said ores, when the values have been agreed upon.

The American Smelting & Refining Company reserves the right to route or divert the ore and concentrates shipped under this contract.

In case of acts of nature, strikes of any kind affecting the operations of the contracting parties, fire, floods, shortage of cars, financial crises, wars or insurrections or any cause whatsoever, which being

beyond the control of the contract parties or either of them 337 should make it a disability or serious hardship on the Mines

Company to ship the ores herein contracted, or for the Smelting Company to receive, purchase and smelt such ores; the parties hereto shall be relieved from responsibility or claim for damages for failure to ship, or receive same, but shipments and receipts shall be resumed as soon as the disabling cause is removed.

This contract shall be binding upon the heirs to the benefit of the successors and assigns of the respective parties hereto; and as to

the Mines Company shall be deemed to be and considered as a covenant running with the land.

The Mines Company in further consideration of the premises undertakes and agrees that, in the event that it shall sell, lease or otherwise dispose of all or any of its mining property producing ores covered by this contract, during the period covered by this agreement, it will cause its successors and assigns in interest in such mining property to assume, fulfill and carry out each, every and all of the covenants and agreements herein set forth to be kept and performed by the Mines Company.

This contract and agreement is intended to and shall supersede, take the place of, and be substituted for, any and all contracts for the sale and purchase of ore, heretofore existing between the party of the second part and the Silver King Mining Company, a corporation, and the Kearns-Keith Mining Company, a corporation, it being understood and expressly agreed that the party of the first part has succeeded to all the properties, both real and personal, of said Silver King Mining Company and said Kearns-Keith Mining Company.

This contract to be binding must first be duly authorized approved and confirmed by the Executive Committee of the second party who, to evidence such authorization, approval and confirmation, shall cause this contract to be signed by the Secretary of such Committee.

It is further understood and agreed that the Smelting Company shall have the right and privilege of terminating and annulling this contract at any time, upon giving thirty days' written notice to the Mines Company, by personally serving such notice at the office of the Mines Company, in Salt Lake City, Utah, upon the President or Secretary thereof.

338 In witness whereof, the parties hereunto set their hand the day and year first herein above mentioned.

SILVER KING COALITION
MINES COMPANY,

By DAVID KEITH,
President.

Witness:

F. J. WESTCOTT.

AMERICAN SMELTING AND
REFINING COMPANY,

By (signature?)
Director General, Utah Department.

Attest:

Secretary.

By (signature?)
General Manager Utah Department.

I, Frank J. Westcott, Secretary of the Silver King Coalition Mines Company, do hereby certify that the following is a full and true copy of a resolution adopted on motion duly made and seconded, at a meeting of the Board of Directors of the said Company duly

called and held at Room 173, David Keith Building, Salt Lake City, Utah, on the 14 day of June, 1907, a quorum being present.

"Resolved, That the execution by President David Keith on behalf of this company of a contract with the American Smelting and Refining Company for the sale to them of the crude ore and concentrates produced by this company for a period of eighteen months and 17 days upon the terms and conditions specified therein, be, and the same is hereby ratified and confirmed."

[SEAL.]

F. J. WESTCOTT,

Secretary.

Salt Lake City, Utah, June 14, 1907.

(Exhibit 106, is in words and figures as follows, to-wit:)

Memorandum.

The understanding is:

That the present Kearns-Keith and Silver King contracts shall be annulled;

230 That a new contract shall be drawn up, to be made with the Silver King Coalition Mines Company, which will cover the outputs of all of the properties of the Silver King Coalition Mines Company;

That the terms of settlement under that contract shall be the terms now applying to the Kearns-Keith contract (which will be annulled);

That the time of the expiration of this new contract shall be the time as specified in the Kearns-Keith contract (Which will be annulled);

That the time of the expiration of this new contract shall be the time as specified in the Kearns-Keith contract (to be annulled), and which is January 1st, 1909;

And:

That the Smelting Company shall have the privilege, on 30 days' notice, of annulling the contract.

A. S. R. & CO.

C. W. WHITLEY (?).

Director General Utah Dept.

DAVID KEITH,

For Silver King Coalition Mines Co.

Exhibit 107 is in words and figures as follows, to-wit:

Know all men by these presents:

I, F. Augustus Heinze, of the City of Butte, State of Montana, for One Dollar (\$1.00) and other valuable considerations, the receipt whereof is hereby acknowledged, have sold, assigned, transferred, set over and delivered, and by these presents do sell, assign, transfer, set over and deliver, unto Miners Smelting Company, a corporation organized and existing under and by virtue of the laws of the State

of Maine, all my right, title and interest in, to and under that certain contract, bearing date May 21st, 1907, between Silver King Coalition Mines Company, a corporation organized under the laws of the State of Nevada, and myself, a copy of which is hereunto attached and marked Schedule A.

In witness whereof, I have hereunto set my hand and seal, this 3rd day of July, 1907.

F. AUG. HEINZE. [SEAL.]

Witness:

GEO. BAGLIN.

340 Miners Smelting Company hereby accepts the foregoing assignment of said contract, this 3rd day of July, 1907.

MINERS SMELTING COMPANY,
[SEAL.] By JOHN B. SUMMERFIELD,
President.

Attest:

PHILIP A. CARROLL,
Secretary.

"SCHEDULE A."

Contract.

This Agreement, made and entered into this 21st day of May, A. D. 1907, by and between the Silver King Coalition Mines Company, a corporation organized under the laws of the State of Nevada, hereinafter called the "Mining Company," party of the first part, and F. Augustus Heinze of Butte, Montana, hereinafter called the "Smelting Company, party of the second part, Witnesseth:

For and in consideration of the sum of One Dollar (\$1) lawful money of the United States paid by each of said parties to the other, the receipt of which is hereby acknowledged and other payments and mutual covenants, conditions and agreements herein contained, and the purchase from the Mining Company of One Hundred and fifty thousand (\$150,000) shares of its stock, the parties hereto have agreed, and do agree with each other as follows:

First. The Mining Company agrees to sell to the Smelting Company, his legal representatives, successors and assigns, its entire output of crude ore and concentrates, for a period of ten (10) years from the first day of January, 1909, and agrees that in no case shall any ore or concentrates be shipped by first party to any smelter other than that of second party or his assigns after the first day of January, 1909.

Second. The Smelting Company agrees to receive the above mentioned ore and concentrates delivered in carload lots f. o. b. Park City, Utah.

Payments.

ilver: Pay for Ninety-five per cent (95%) of contents of the New York quotation on date of agreement of assay, as furnished by Messrs. Handy & Harmon to the Western Union Telegraph Company.

old: Pay for entire contents at Nineteen Dollars (\$19.00) per ton.

lead: Pay for Ninety per cent (90%) of contents at Ninety per cent (90%) of the New York quotation as furnished by the Engineering & Mining Journal on date of first assay.

copper: Pay for the entire contents, less twenty-six (26) pounds assay, at One Dollar (\$1) per unit for all ores that do not exceed copper, wet assay. If, however, the ore contains an excess of copper, wet assay, such excess of copper over 4%, wet assay, shall be paid for at 4½ cents per pound under the average quoted price of electrolytic cathodes, as compiled by the Engineering and Mining Journal of New York City during the calendar week preceding date of Mining Company's first assay of the Lot in question.

Treatment Base.

The Mining Company shall pay, and the Smelting Company shall accept and deduct therefor, a freight and treatment base per ton of one thousand (2,000) pounds avoirdupois, dry weight, of Fourteen Dollars (\$14.00) per ton f. o. b. cars, Park City, Utah.

Sampling.

The sampling of all product delivered hereunder shall be done and at the expense of the Mining Company at its sampling works located at Park City, in the State of Utah, and Mining Company hereby guarantees the accuracy of said sampling and agrees to furnish to the Smelting Company a sealed sample for assay, and to keep (2) other sealed samples until called for by the Smelting Company, one of which shall be submitted for umpire, in case of dispute, for settlement as hereinafter provided for under the head of "arbitration." Nothing in this contract, however, shall be construed to prevent the Smelting Company from sampling all or any lots of ores or concentrates at its own smelting plant, or to request the umpire, in case of dispute, to have any lots of ores or concentrates assayed at an independent sampling works, all costs of the independent sampling to be borne by the party whose results are farthest removed from the independent sample.

Settlement.

Final settlement for silver and lead shall be based upon the market price of the respective metals ninety (90) days from date of first assay.

Full pro forma payments shall be made by the Smelting Company for said ores and concentrates when the assays have been agreed upon subject to final adjustment ninety days thereafter as hereinabove stated.

Assays.

For the determination of the lead in the ores a fire assay shall be made. The assays shall be made by two assayers, one of whom shall be selected by the Mining Company, and the other by the Smelting Company. In case the assayers do not agree within reasonable limits, then a third independent assayer, mutually agreed upon, shall act as umpire, and his determination of the value shall govern in settlement, providing the same be between the results obtained by the assayers of the Mining Company and the Smelting Company; should the umpire's results be higher than the highest, or lower than the lowest, then the assays of the Mining Company or Smelting Company nearest the umpire shall govern in the settlement.

The cost of the umpire determination shall be paid by the party hereto who submitted results hereinabove mentioned, for metal or metals to be umpired which are farthest removed in value from those of the umpire assay.

Strikes, etc.

In case of acts of nature, strikes of any kind affecting the operations of the contracting parties, fires, floods, shortage of cars, financial crisis, wars or insurrections, or any cause whatsoever, which being beyond the control of the contracting parties or either of them, should make it a disability on the Mining Company to ship the ores herein contracted, or for the Smelting Company to receive, purchase and smelt such ores, the parties hereto shall be relieved from the responsibility or claim for damages for failure to ship or receive the same, but shipments and receipts shall be resumed as soon as the disabling cause is removed, and the period of any such interruption or interruptions shall be added to the term provided for in this contract.

Succession.

This contract shall be binding upon and inure to the benefit of the legal representatives, successors and assigns of the respective parties hereto and as to the Mining Company, shall be deemed to be and considered as a covenant running with the land.

The Mining Company in further consideration of the promises undertakes and agrees that, in the event that it shall sell, lease or otherwise dispose of all or any of its mining property producing ores covered by this contract, during the period covered by this agreement, it will cause its successors and assigns in interest in such mining property to assume, fulfill and carry out, every and all of the cove-

nants and agreements herein *and* forth to be kept and performed by the Mining Company, and

It is further understood and agreed by and between the Mining Company and Smelting Company, that should they decide to ship low grade ores that run a large excess of iron and low in lead, from said mine, according to terms and prices hereafter to be agreed upon, they will be permitted to do so by mutual agreement.

This contract may be assigned by second party to a smelting and refining company to be organized by him and upon such assignment all obligation on the part of said F. Augustus Heinze hereunder shall hereupon terminate.

In Witness Whereof the parties hereunto have set their hands the day and year first above written.

[SEAL.]

SILVER KING COALITION
MINES COMPANY,
By DAVID KEITH,
President.

Attest:

FRANK J. WESTCOTT.

Witness:

A. C. ELLIS, JR.

Mr. Ray: We offer in evidence page marked 6 of the Minute Book A of the Silver King Coalition Mines Company, headed, "Contract," which refers to the adoption *or* the Heinze, namely:

"At a meeting of the Board of Directors of the Silver King Coalition Mines Company, duly held at the office of Dickson, Ellis, & Schuller, Room 515 Tribune Building, Salt Lake City, Utah, on the 21st day of May, 1907, at the hour of 3 o'clock p. m. of that day, pursuant to the call of the directors, all of the directors being present, the following business was transacted:

On motion duly made and seconded, Mr. David Keith was unanimously elected President of the Board of Directors, Mr. Thomas Earnings, Vice-President thereof, Mr. F. J. Westcott Secretary thereof; and Mr. W. S. McCornick Treasurer thereof. Each of the directors took the oath of office required to be taken under the statute of the State of Nevada, and filed the same with the secretary of the company, and each of the officers of the Board of Directors took a similar oath and filed the same with the secretary.

On motion of W. S. McCornick, seconded by J. S. Brandsford, it was unanimously resolved that the State Agent & Transfer Syndicate, a corporation, resident of Carson City, Nevada, be appointed the State Agent of the company in the State of Nevada, to represent the company and act as its agent within said state, as provided by the statutes thereof.

It was further moved, seconded and unanimously carried out that the secretary procure the necessary stationery, stock books and corporate books, seals and other necessary office appurtenances.

It was further moved, seconded and unanimously carried that the stockholders of the company, or their nominees, the necessary certificates of stock, evidencing the number of shares to which each may be entitled.

It was further moved, seconded and carried that the President and Secretary cause to be re-prepared all the necessary papers and documents required to be filed in the State of Nevada and with the State Agent of the company, and forward for filing and likewise cause to be filed with the proper county and state officials of the State of Utah, all papers and documents required to be filed.

On motion, duly seconded, it was unanimously resolved that the offices of the company, until the further order of the Board of Directors, be at room 173, Keith Building, Salt Lake City, Utah, and that the regular monthly meeting of the Board shall be had and held there.

Director Kearns presented to the Board a contract between him and F. Augustus Heinze, under date of the 6th of May, 1907, being the same contract heretofore ratified, adopted and confirmed by the stockholders of this company, and requested that the Board, pursuant to the action of the stockholders, formally adopt said contract as the contract of the company; whereupon, on motion, duly
345 made and seconded, the said contract, as presented, was unanimously approved, ratified and adopted as the contract of this company, pursuant to the resolution of the stockholders.

Director Kearns also stated that annexed to said contract and marked "Schedule A" was a copy of a contract to be entered into between this company and F. Augustus Heinze, for the sale of the entire output of crude ore and concentrates of the company for the period of ten years.

The directors, after fully considering said contract and its terms, unanimously resolved, upon motion duly made and seconded that the contract be entered into — behalf of this company, and the President and Secretary were thereupon duly authorized and directed to execute such contract on behalf of the company with the said F. Augustus Heinze. Said contract to be in the words and figures as follows, to-wit:

(Then follows copy of the preceding contract.) [Said contract appears at Marginal page 451 of this printed record.]

Entries in Assay Book of Defendant.

			Per ct.	Oz.
			Lead.	Silver.
1914.				
Oct. 2.	556	#3 Columbia Raise Toole, J. H.....	3.6	12.5
" 3.		Sample #1 Columbia Raise 2d level N. E. J. H.....	1.7	12.2
		Sample #2 Columbia Raise 1st level E. end.....	56.8	30.4
" 5.	J. H. Avg. 9 cars	2d class No. 1 Chute Hanauer.....	12.9	22.8
" 6.	J. H. #2 Raise.....		1.2	12.1
		Level #3 Columbia Raise.....	1.7	7.9
" 7.	A. Mc. to J. H. Level #1 Col. Raise			
		No. 2 Right side.....	1.1	7.8
	A. Mc. to J. H. Level #2 Col. Raise			
		No. 2 right side.....	49.7	32.1
	A. Mc. to J. H. Level #2 Col. Raise			
		No. 2 Iron right side.....	1.8	13.6
	A. Mc. to J. H. Level #1 Col. Raise			
		No. 3 Breast.....	.6	4.1
" 12.	Toole, J. H. both sides	Alliance 2d class.....	8.0	9.2
" 17.	J. H. from Hanauer.....		16.1	46.7
" 24.	A. M. to J. H. Col. Raise #3 face of drift.....		.7	11.3
" 29.	J. H. sample 1 Avg. 15 cars	Hanauer, Oct. 28-14.....	33.2	60.
	" " #1 " 20 cars	Hanauer, Oct. 29-14.....	35.2	84.6
" 31.	J. H. sample #1 " 5 cars	1st		
		Class Raise 1 Hanauer.....	35.3	50.6
	J. H. sample 2 avg. 9 cars	2d Raise 2 Hanauer.....	34.6	64.2
	J. H. 9 cars	2d class Alliance.....	1.9	1.7

346 Mr. Dickson: The testimony as to the Hanauer I object to as irrelevant and immaterial. It already appears it refers to the Hanauer tunnel, anything that came through that, as it probably does, it is 800 feet above these stopes and outside of any territory in controversy. I don't see what the value of that ore that came out of that would be relevant here.

Mr. Critchlow: It is offered for a number of different reasons, among other reasons is this, it will be seen as we progress through this that for stopes other than the Elephant stope, they sampled the cars of ore and kept track of them in this way, but none, with one or two exceptions, from the Elephant stope, although they were working at the same time.

The testimony in this case already taken shows, and the court so found that this stope was the same vein as the Alliance tunnel, so that it throws light also upon the question which is most seriously disputed here, as to whether the proportion of second class and first class which is reported by these shift bosses as to have come out of the Elephant stope is at all correctly reported, and it is of course material, for this reason, they haven't left this ore in any such shape that we can get it, we cannot see it, we don't know what it is, we have to take the very nearest stopes in the same vein to determine the character of the ore and the relation of the first class and the second class to that. In that case it is material.

Again your Honor will see these are material for the reason I have already spoken of, that in working stopes only a few hundred feet away, they kept strict tab on the value of the ore as they mined it and kept those assays in their books, a complete record of them, and for another reason these assays will show that these shift bosses, the superintendent and others, who turned these samples into the assayer for assaying, kept a serial number of their assay, or tags, and of course, with duplicates in their own book, so they have assay tags with a record which should correspond with this, and they should have their serial number, so they can produce them, not only Mr. Hume, but Mr. O'Neill and Mr. McDonald and others who made these assays.

The Court: You may take the testimony.

Mr. Dickson: We note an exception.

		Per cent	Oz.
		Lead.	Silver.
1914.			
Nov. 3.	J. H. sample #1 Avg. 12 cars 1st Hanauer.....	33.7	40.8
" 5.	A. M. to J. H. Columbia Raise #3 face of drift.....	13.3	23.
"	to J. H. Columbia Raise #2 .....	.8	4.6
347			
	J. H. Sample #1 Avg. 14 cars Hanauer.....	39.4	59.2
	A. M. to J. H. Receiver stope.....	6.6	7.2
	Columbia raise chute #1.....	2.7	4.8
" 6.	J. H. Avg. 6 cars 1st Hanauer.....	40.7	39.
" 7.	A. Mc. to J. H. Receiver stope Breast.....	13.4	7.9
"	" " Col. raise #3 face.....	14.8	39.
" 8.	" " Receiver stope breast.....	20.7	9.7
"	" " Col. Raise #3 Breast.....	3.4	35.7
" 9.	J. H. Avg. 8 cars 1st Hanauer.....	37.4	28.3
" 10.	J. H. " 11 " 2d "	10.3	19.7
	McCann J. H. Level #3.....	2.6	20.2
	A. M. to J. H. Columbia raise #3.....	41.6	20.5
"	" " Receiver	11.3	23.2
" 13.	Mill sorted 1st class 46,200 lbs.....	35.6	61.8

Q. That was 1st class ore that was sorted out of the second class ore in the mill, wasn't it?

A. Mr. Delvin can tell you more about it.

Q. Aren't you familiar enough with the proceedings up there to know they sorted out first class in the mill?

A. Yes.

Q. That is an average of that?

A. Yes.

		Per cent	Oz.
		Lead.	Silver.
1914.			
Nov. 15.	J. H. Avg. 11 cars 1st #1 raise stope Hanauer.....	40.8	28.
"	3 cars 2d #2 " " Hanauer.....	15.4	17.9
	A. Mc. to J. H. Columbia raise #2 breast.....	.3	2.1
Nov. 16.	A. M. to J. H. Columbia Raise breast Level.....	1.7	2.9

1914.			Lead. Per cent	Silver. Oz.
	J. H. Avg.	2 " 2d $\frac{25}{16}$ raise Hanauer.....	2.8	4.7
	" "	pile 2d main tunnel.....	3.3	4.6

1915.

Jan. 6.	J. H. Avg.	4 cars 2d main tunnel Hanauer.....	2.6	7.5
" 14.	" "	3 " 2d " " " ".....	19.7	11.2
" 15.	" "	10 " 2d from Alliance.....	6.8	5.4
" 18.	" "	streak ore main tunnel Hanauer.....	.3	1.6
" 21.	O'Neill	600 Silver Hill 6" Seam.....	84.7	40.2

Q. What is the largest amount you can get out of Galena ore?

A. 86.6.

Q. 84.7 little less than 2 per cent of pure?

A. Yes.

Jan. 23.	J. H. Avg.	5 cars 1st $\frac{21}{16}$ stope 50 foot level Hanauer.	69.2	32.8
" 25.	" "	24 " 1st $\frac{21}{16}$ stope Hanauer.....	54.7	32.2
" 26.	" "	3 " 2d main tunnel Hanauer.....	14.8	9.8
" 27.	" "	6" streak foot wall $\frac{21}{16}$ Stope.....	9.1	5.2
Jan. 29.	O'Neill	Fissure Dft. 1 car 1/c.....	3.1	5.8
" 30.	J. H. Avg.	22 cars 1st cl. Hanauer.....	46.1	31.6
Feb. 2.	J. H. Avg.	2 cars ore Main Tunnel Hanauer.....	63.2	30.3
" "	" "	4 " 2/c " " " ".....	31.4	21.2
" 5.	J. H.	1 inch streak East in fissure $\frac{25}{16}$ Raise 85 ft. from level.....	43.4	26.4
" 6.	J. H. Avg.	pile of rock $\frac{21}{16}$ raise $\frac{24}{16}$ vein Hanauer...	2.6	2.4

346

" 12.	" "	Hanauer $\frac{21}{16}$ 2d from pile.....	14.2	9.4
" "	" "	" $\frac{22}{16}$ chute 1/3.....	28.4	18.7
" 14.	" "	8 cars 2d.....	6.8	7.2
" "	" "	main drift under track from pile.....	16.6	11.6
" 15.	" "	Hanauer main tunnel 2/c from pile.....	17.8	11.2
" 16.	" "	2d Class.....	7.1	7.2
" "	" "	1 Class from pile.....	30.6	18.6
" 17.	" "	8 cars 1/c.....	30.6	24.
" 18.	" "	5 cars 1/c.....	26.8	24.6
" "	" "	6 cars 1/c.....	21.	15.3
" 19.	" "	Main Tunnel 2/3 from pile.....	13.2	6.4
" "	" "	8 cars 2/c.....	8.7	5.6
" "	" "	No. 1 Incline.....	.2	.4
" 20.	" "	5 cars 2/c.....	7.4	6.4
" "	" "	2/c from top $\frac{21}{16}$ raise.....	4.2	4.7
" "	" "	Main Tunnel from pile 2/c.....	3.7	7.6
" "	" "	" " " winze.....	60.7	32.8
" 21.	O'Neill	700 Silver Hill 1st class from face.....	76.5	37.6
" 22.	J. H.	Hanauer 3 cars 1/c.....	24.6	12.1
" "	J. H.	Hanauer 2 cars 2/c.....	7.4	8.6

1915.		Per cent Lead.	Ox. Silver
Feb. 23.	J. H. Hanauer from winze.....	.8	1.2
	J. H. Hanauer Main Tunnel winze 2/c.....	2.7	3.1
	J. H. Hanauer 4 cars 2/c from stopes.....	7.6	8.0
Feb. 24.	J. H. Hanauer 3 cars 1/c.....	26.4	19.3
	J. H. Hanauer 6 cars 2/c.....	5.7	6.8
" 25.	J. H. Hanauer West Raise 5 ft. level.....	.7	1.6
	J. H. Hanauer West end 50 ft. level.....	2.4	3.7
" 27.	J. H. Hanauer 1st class under track 50 ft. level.....	28.6	14.7
" 27.	J. H. Hanauer 600 stope Alliance.....	3.1	2.4
	Scott Hanauer Tunnel Stope #1 2/c.....	7.5	10.1
	Scott Hanauer Tunnel Stope #1 1/c.....	22.8	20.6
	Scott Hanauer Tunnel Stope #1 3 cars 1/c.....	30.4	17.8
" 28.	Scott Hanauer Tunnel #1 yellow Carbon back.....	1.4	1.2
	Scott Hanauer Tunnel Main tunnel fissure in winze.	8.1	8.4
Q. Who was Mr. Scott?			
A. Shift boss up there at one time.			
Mar. 3.	A. O. Hanauer 5 cars 1/c.....	29.4	15.6
" 8.	J. H. 600 stope Alliance.....	.3	1.6
	Scott Hanauer Tunnel Level Incline Main tunnel 2/c.	11.4	10.8
" 9.	Scott Hanauer 50 ft. level stope #1.....	36.	19.2
" 11.	Scott Hanauer 50 ft. level stope #1 2/c.....	9.4	9.3
	Scott Hanauer scale in back of #1 stope scale on foot wall	14.5	12.
350			
" 13.	Scott Hanauer 50 ft. level stope #1 Sand carbonate in lower bed.....	43.7	47.2
" 15.	J. H. Alliance 3 Floor 600.....	5.8	2.9
	J. H. Alliance still 600 stope.....	5.5	3.7
" 16.	O'Neill 600 Silver Hill muck pile 50 ft. from top 600 raise	13.2	16.6
Mar. 16.	O'Neill 600 Silver Hill 1st Cl. Uzellas place.....	33.6	16.1
" 17.	O'Neill 600 face of stope 5th floor.....	3.1	1.8
" 18.	J. H. 600 right side floor wall McCann.....	5.2	3.7
	J. H. 600 2d floor right side.....	4.3	2.5
	O'Neill 600 face of stope Uzellas place.....	5.9	3.8
" 21.	J. H. 600 Raise McCann.....	25.7	7.8
	J. H. 600 raise light grey Mc.....	39.4	12.4
	J. H. Hanauer 25 raise muck from pile.....	11.6	9.6
	J. H. Hanauer Incline main tunnel 1/c.....	45.2	20.8
" 22.	J. H. Hanauer main tunnel incline 2/c.....	4.1	3.2
	J. H. Hanauer 2 cars 2/c from stopes.....	17.6	19.0
" 23.	J. H. Hanauer Main Tunnel Incline 2/c.....	13.3	5.2
	J. H. Hanauer 4 cars 1/c 50 level.....	31.2	36.4
" 24.	J. H. Hanauer Main tunnel incline 2/c.....	27.6	13.2
	Cunningham 900 Creole Cunningham's place 2/c....	22.3	12.
" 25.	J. H. Hanauer stopes 6 cars 2/c.....	9.6	9.5

		Per cent	Oz.
		Lead.	Silver.
Mar. 25.	J. H. Hanauer 5 ft. level from pile 1/c.....	19.8	23.4
" 26.	J. H. Hanauer 50 foot level from pile 1/c.....	24.8	46.7
	J. H. Hanauer 5 cars 2/c.....	8.4	16.7
" 27.	J. H. Hanauer Main Tunnel incline 2/c.....	10.8	5.5
" 28.	J. H. Hanauer 1 car 2/c 1st stopes.....	4.3	4.2
	J. H. Hanauer Main Tunnel incline 2/c.....	8.4	5.6
	J. H. Hanauer 2 cars 1/c from stopes.....	19.7	30.
" 30.	J. H. Hanauer Main Tunnel incline pile 2/c.....	7.8	5.4
	J. H. Hanauer 4 cars 2/c from stopes.....	7.1	12.1
	J. H. Hanauer 2 cars 1/c from stopes.....	21.2	31.7
" 31.	J. H. Hanauer Main tunnel incline from Pile 2/c...	9.1	4.2
Apr. 1.	J. H. Hanauer Main tunnel incline 2 cars 2/c.....	8.7	6.8
Apr. 1.	J. H. Hanauer west end 50 ft. level.....	2.6	2.6
	J. H. Hanauer 4 cars 2/c.....	6.2	9.7
" 1.	O'Neill 600 S. H. Hard line behind #1 raise.....	2.6	1.5
	O'Neill A. H. Avg. 10 cars 2/c.....	5.1	4.9
" 4.	J. H. Hanauer 6 cars 2/c.....	10.2	14.2
	J. H. Hanauer 5 ft. level 3 cars 1/c.....	29.1	21.
" 5.	J. H. Hanauer main tunnel incline 1 car 2/c.....	11.2	6.3
	J. H. Hanauer 6 cars 2/c.....	12.4	8.1
" 6.	J. H. Hanauer main tunnel incline 2 cars 2/c.....	14.2	7.8
	J. H. Hanauer from stopes 4 cars 1/c.....	30.4	19.2
" 8.	O'Neill 700 S. H. 6" bed of ore 704 Drift.....	35.7	12.6
	J. H. Hanauer main tunnel incline 2 cars 2/c.....	4.6	16.4
	J. H. Hanauer 1 car 2/c.....	8.	9.2
	J. H. Hanauer 6 car 1/c stopes.....	20.	16.6
321			
" 9.	J. H. Hanauer 3 cars 2/c stopes.....	12.2	19.1
	J. H. Hanauer 4 cars 1/c.....	20.6	15.4
" 10.	J. H. Hanauer 50 ft. level ore from pile.....	19.8	19.6
	J. H. Hanauer main tunnel incline 2 cars 2/c.....	8.4	3.8
" 11.	J. H. Hanauer 5 cars 2/c stopes.....	14.7	11.2
	J. H. Hanauer 3 cars 1/c.....	14.2	8.2
" 12.	J. H. Hanauer 1 car 2/c main tunnel incline.....	25.2	17.8
	J. H. Hanauer 8 cars 2/c stopes.....	10.6	7.4
" 13.	J. H. Hanauer 4 cars 2/c.....	4.0	6.1
" 14.	J. H. Hanauer 6 cars 2/c.....	9.6	13.2
" 14.	J. H. Hanauer 50 ft. level from pile 2/c.....	11.6	14.4
	J. H. Hanauer 3 cars 1/c.....	8.9	8.1
Apr. 15.	J. H. Hanauer 1st from pile 50 ft. level.....	31.7	44.6
	J. H. Hanauer 6 cars 1/c from stopes.....	32.1	31.2
" 16.	J. H. Hanauer Hanauer from pile 1/c.....	30.4	37.6
	J. H. Hanauer from pile main tunnel incline.....	5.8	4.5
" 17.	J. H. Hanauer 5 cars 1/c.....	19.	28.2
" 18.	J. H. Hanauer 50 ft. level from pile 2/c.....	19.4	16.2
	J. H. Hanauer from pile 1/c.....	14.	26.8
	J. H. Hanauer from stopes 2 cars 1/c.....	20.2	30.4

		Per cent	Oz.
		Lead.	Silver.
Apr. 18.	J. H. Hanauer 6 cars 2/c.....	10.	14.7
" 19.	O'Neill 600 11 cars 2/c.....	9.7	5.6
	O'Neill 700 Block etc 704 drift.....	36.2	39.1
	J. H. Hanauer 5 cars 1/c.....	23.	32.3
	J. H. Hanauer 4 cars 2/c.....	6.8	11.6
" 20.	J. H. Hanauer from pile 1/c.....	25.8	34.2
" 21.	J. H. Hanauer from pile 1/c.....	32.5	38.4
	J. H. Hanauer 5 cars 1/c.....	25.4	39.2
" 22.	O'Neill old drift.....	2.2	2.6
	J. H. Hanauer 5 cars 1/c.....	28.4	42.8
" 23.	J. H. Hanauer 4 cars 1/c.....	33.6	41.2
" 24.	J. H. Hanauer 6 cars 1/c.....	16.2	24.6
	J. H. Hanauer from Pile main tunnel incline.....	11.8	23.2
" 25.	J. H. Hanauer main tunnel from pile 2/c.....	1.7	2.8
	J. H. Hanauer 6 cars 1/c.....	20.3	27.6
" 26.	J. H. Hanauer from pile 1/c.....	25.6	36.8
	J. H. Hanauer 5 cars 1/c.....	12.3	38.6
" 27.	J. H. Hanauer bin 1/c.....	16.7	22.8
	J. H. Hanauer bin 2/c.....	7.4	9.4
	J. H. Hanauer 5 cars 1/c.....	18.6	32.8
	Denson Hanauer 12 cars 1/.....	21.4	36.
" 28.	J. H. Hanauer McEvoy place 1/c.....	20.3	47.3
	J. H. Hanauer Ed place 1/c.....	11.2	23.2
	J. H. Hanauer 5 ft. level from pile 2/c.....	15.6	13.4
	J. H. Hanauer Main Tunnel from pile 2/c.....	5.4	4.2
282			
" 29.	J. H. Hanauer Raise 50 ft. level.....	12.3	18.2
	J. H. Hanauer from pile 50 ft. level 1/c.....	31.7	35.2
" 30.	J. H. Hanauer 1/c from raise 50 ft. level.....	22.6	96.3
	J. H. Hanauer 1/c from pile McEvoy place.....	26.7	43.7
	J. H. Hanauer 1/c Ponikers place.....	24.	29.2
	J. H. Hanauer Main tunnel incline from pile 2/c....	7.1	4.0
	J. H. Hanauer 10 cars 1st cl.....	23.6	43.2
May 2.	J. H. Hanauer raise 50 ft. level 1/c.....	36.2	54.2
	J. H. Hanauer McEvoy from pile 1/c.....	27.8	45.5
	J. H. Hanauer 5 cars 1/c.....	27.4	48.7
	J. H. Hanauer from pile 2/c.....	23.2	48.2
	J. H. Hanauer 3 cars 1/c.....	28.1	55.
" 3.	J. H. Hanauer main tunnel incline 2 cars 2/c.....	9.2	6.1
	J. H. Hanauer 4 cars 1/c.....	23.4	33.2
4.	J. H. Hanauer from Pile #2 Slope 1/c.....	23.7	35.2
	J. H. Hanauer 8 cars 1/c.....	23.2	42.4
5.	J. H. Hanauer Ponikers place from pile 1/c.....	18.7	29.6
	J. H. Hanauer 4 cars 1/c.....	29.2	65.7
	J. H. Hanauer McEvoy place 1/c.....	26.1	73.
6.	J. H. Hanauer Ed place from pile 1/c.....	19.2	32.
	J. H. Hanauer from pile 2/c.....	11.2	16.4
	J. H. Hanauer 5 cars 1/c.....	22.3	32.6

		Per cent Lead.	Oz. Silver.
May 7.	J. H. Hanauer Redire place from pier 1/.....	29.7	32.4
	J. H. Hanauer McElroy place 1/c.....	24.5	69.6
	J. H. Hanauer 6 cars 1/c.....	27.8	35.7
8.	J. H. Hanauer Wilson place 2/c.....	14.4	28.3
	J. H. Hanauer 7 cars 1/c.....	24.6	35.6
9.	J. H. Hanauer 6 cars 1/c.....	15.2	43.7
10.	J. H. Hanauer Broll place 1/c.....	26.4	76.
	J. H. Hanauer 50 ft. level 2/c.....	7.6	9.1
	J. H. Hanauer 6 cars 1/c.....	34.8	36.2
	J. H. Hanauer from pile #2 slope 2/c.....	9.4	19.3
11.	J. H. Hanauer Ponikors place 50 ft. level from pile 2/c.....	19.3	11.6
11.	J. H. Hanauer 6 cars 1/c.....	24.4	45.7
12.	J. H. Hanauer grab from Wilson place.....	14.6	17.2
	J. H. Hanauer from pile 50 ft. level 1/c.....	18.7	23.6
	Deason Hanauer Avg. 49 cars from chute.....	27.2	27.
13.	J. H. Hanauer McElroy place 1/c.....	21.8	53.6
	J. H. Hanauer 7 cars 1/c.....	24.	36.4
	J. H. Hanauer 700 level slope 730 Silver Hill.....	49.	25.8
14.	J. H. Hanauer 5 cars 1/c.....	29.4	27.4
	Deason Avg. 42 cars chute.....	23.4	32.
15.	Deason Hanauer 16 cars chute 1/c.....	19.4	29.6
	J. H. Hanauer 50 ft. level from pile 1/c.....	14.6	25.
	J. H. Hanauer 5 cars 1/c.....	26.7	33.6
16.	J. H. 700 McCann Silver Hill.....	4.2	3.8
	J. H. 600 McCann Silver Hill.....	5.7	6.9
	J. H. Hanauer 5 cars 1/c.....	39.2	31.6
	J. H. Hanauer 8 cars 2/c.....	11.4	23.2
353			
17.	J. H. Hanauer 10 cars 2/c.....	7.2	13.8
	J. H. Hanauer 4 cars 1/c.....	17.5	35.4
18.	J. H. Hanauer 2 cars 2/c.....	4.6	18.4
	J. H. Hanauer 3 cars 1/c.....	22.4	48.
19.	O'Neill 700 703 slope 1/c Silver Hill.....	79.	38.2
			Cu. m
			22.3
	J. H. Hanauer 1 car 1/c.....	44.2	42.1
	J. H. Hanauer Wilson place from pile.....	17.2	35.8
	J. H. Hanauer 10 cars 2/c.....	13.	21.2
20.	J. H. Hanauer 1 car 1/c.....	49.2	65.6
	J. H. Hanauer Wilson place.....	20.7	39.8
	J. H. Hanauer Ed place 1/c.....	37.0	33.7
21.	J. H. Hanauer Wilson place from pile.....	14.	27.6
	J. H. Hanauer 2 cars 1/c.....	32.5	33.2
	J. H. Hanauer 10 cars 2/c.....	14.8	25.2
22.	J. H. Hanauer Anderly place from pile 1/c.....	36.8	57.4
	J. H. Hanauer 4 cars 1/c.....	26.7	41.

		Per cent Lead.	Oz. Silver.
22.	J. H. Hanauer 8 cars 2/c.....	14.4	14.7
	J. H. Hanauer 3 cars 1/c.....	23.2	24.
	J. H. Hanauer from Wilson place.....	13.6	28.3
27.	Scott Hanauer slope #1 1/c tunnel level.....	14.1	32.2
	Hanauer slope #1 2/c tunnel level.....	2.5	16.6
28.	Scott Hanauer Tunnel Level slope 1 Wilson place..	16.9	28.4
	Scott Hanauer Tunnel Level Slope 1 1/c.....	22.1	41.4
	Scott Hanauer Tunnel Level Slope 1 2/c.....	.71	9.5
29.	Scott Hanauer Slope #1 Tunnel Level Wilson place..	24.1	45.4
	Scott Hanauer Slope #1 Tunnel Level Wilson place 2/c.....	11.2	23.2
30.	Scott Hanauer Slope #1 Tunnel Level 1/c.....	25.7	36.5
	Scott Hanauer Slope #1 Tunnel Level 2/c.....	11.8	17.6
31.	Scott Hanauer Slope #1 Tunnel Level 1/c.....	26.7	45.1
	Scott Hanauer Slope #1 Tunnel Level 2/c.....	9.6	16.7
1.	Scott Hanauer Tunnel Level Slope #1 1/c.....	36.2	65.8
	Scott Hanauer Tunnel Level Slope 1 2/c.....	16.4	29.4
2.	Scott Hanauer Tunnel Level Slope 1 1/c.....	18.5	41.8
	Scott Hanauer Tunnel Level Slope 1 2/c.....	11.	17.2
3.	Scott Hanauer Tunnel Level Slope 1 2/c.....	9.4	17.8
	Scott Hanauer Tunnel Level Slope 1 1/c.....	21.	64.2
	Scott Hanauer Tunnel West drift.....	.3	2.1
5.	Scott Hanauer Tunnel West Slope #1 1/c.....	23.8	43.6
	Scott Hanauer Tunnel West Slope #1 2/c.....	8.	29.6
6.	Scott Hanauer Tunnel West drift #1 2/c.....	15.	15.6
	Scott Hanauer Tunnel Ollus mine.....	2.4	2.8
	Scott Hanauer Tunnel 1/c.....	41.3	60.7
7.	Scott Hanauer Tunnel Slope #1 2/c.....	4.2	15.4
	Scott Hanauer Tunnel Slope 1 1/c.....	27.4	36.
8.	Scott Hanauer Tunnel Slope #1 2/c.....	13.6	25.8
9.	Scott Hanauer Tunnel Slope #1 1/c.....	22.6	47.3
	Scott Hanauer Tunnel Slope 1 Boys place 2/c.....	15.4	27.4
10.	Scott Hanauer Tunnel Slope 1 Me. place 2/c.....	14.3	16.
	Scott Hanauer Tunnel Slope 1 Wilson place 1/c.....	24.	42.6
11.	Scott Hanauer Tunnel Slope 1 2/c.....	9.4	11.2
	Scott Hanauer Tunnel Slope 1 2/c.....	36.1	48.3
12.	Scott Hanauer Tunnel Slope 1 2/c.....	2.2	3.1
13.	Scott Hanauer Tunnel Slope #1 1/c.....	27.1	35.8
	Scott Hanauer Tunnel Slope 2/c.....	4.4	6.1
	Scott Hanauer Tunnel Slope 1/c.....	18.	30.6
14.	Scott Hanauer Tunnel Slope 1/c.....	25.7	35.2
	Scott Hanauer Tunnel Slope 2/c.....	19.3	25.6
15.	Scott Hanauer Tunnel Slope 1/c.....	22.0	35.6
	Scott Hanauer Tunnel Slope 2/c.....	14.6	17.2
16.	Scott Hanauer Tunnel Slope 1/c.....	16.4	33.4
	Scott Hanauer Tunnel Slope 1/c.....	28.	42.8
21.	Scott Hanauer Tunnel Slope 2/c.....	12.2	15.6

		Per cent Lead.	Oz. Silver.
June 21.	Scott Hanauer Tunnel Stope 1/c.....	18.6	32.
22.	Scott Hanauer Tunnel Stope 1/c.....	19.1	22.8
	Scott Hanauer Tunnel old fillings in Roaring Lion, Inc.	5.4	12.5
23.	J. H. 2nd class from Pile 50 ft. level.....	13.2	38.6
	J. H. 5 cars 1/c.....	24.3	32.4
24.	J. H. Roaring Lion.....	1.7	10.
	J. H. Hanauer old filling from Roaring Incline.....	.4	1.6
	J. H. Hanauer 3 cars 1/c.....	21.6	33.
	J. H. Hanauer 1/c from pile.....	21.2	25.6
25.	J. H. Hanauer Roaring Incline.....	...	2.4
	J. H. Hanauer 50 ft. level from Pile 1/c.....	20.8	26.2
26.	J. H. Hanauer 1/c from pile.....	21.4	29.6
	J. H. Hanauer 3 cars 2/c.....	11.1	24.2
	J. H. Hanauer 4 cars 1/c.....	27.2	32.
27.	J. H. Hanauer from #3 raise 2/c.....	14.7	13.
	J. H. Hanauer from pile 1/c.....	23.4	52.4
	J. H. Hanauer 4 cars 1/c.....	30.	30.2
28.	J. H. Roaring Incline filling.....	1.2	5.6
	J. H. Hanauer 6 cars 1/c.....	27.3	45.2
	J. H. Hanauer 5 cars 2/c 50 ft. level.....	13.6	28.
29.	J. H. Hanauer 4 cars 1/c.....	26.4	40.7
	J. H. Hanauer from pile.....	18.2	22.5
30.	J. H. Hanauer from pile 50 ft. Level.....	10.3	25.2
	J. H. Hanauer 5 cars 1/c.....	31.8	31.6
	J. H. Hanauer 4 cars 2/c 50 ft. level.....	11.2	20.3
	J. H. Roaring Incline filling.....	...	1.2
July 1.	J. H. Alliance 600 Stope.....	2.6	2.8
	J. H. Hanauer from pile #2 Raise 2/c.....	12.4	14.2
	J. H. Hanauer Speas place 1/c.....	22.4	28.1
355			
2.	J. H. Hanauer 5 cars 1/c.....	268.8	36.6
	J. H. Hanauer 2/c.....	11.7	16.4
3.	J. H. Hanauer Ollus Incline 1 car 2/c.....	14.8	11.2
4.	J. H. Hanauer from pile Shea's place 1/c.....	32.	49.7
	J. H. Hanauer from pile 50 ft. level.....	9.6	25.8
	J. H. Hanauer 3 cars 1/c.....	27.1	32.4
	J. H. Hanauer 6 cars 2/c.....	12.	24.3
7.	J. H. Hanauer #2 stope from pile 2/c.....	9.8	21.4
	J. H. Hanauer 50 ft. level 3 cars 1/c.....	26.8	40.
8.	J. H. Hanauer from pile 1/c.....	31.	39.6
	J. H. Hanauer 6 cars 1/c.....	32.1	32.2
	J. H. Hanauer 3 cars 2/c.....	12.7	21.8
9.	J. H. Hanauer #2 stope 2/c.....	9.1	20.8
	J. H. Hanauer 2 cars 1/c.....	30.6	36.
10.	J. H. Hanauer Roaring Incline filling #1.....	...	1.2
	J. H. Hanauer Incline filling #2.....	2.3	2.4
	J. H. Hanauer Top #5 Raise.....	7.4	5.1

		Per cent Lead.	Oz. Silver.
10.	J. H. Hanauer #3 stope 3 cars 1/c.....	28.	33.4
12.	J. H. Hanauer 2 cars 1/c.....	32.2	30.2
	J. H. Hanauer 7 cars 2/c #1 chute.....	8.7	13.6
13.	J. H. Hanauer 50 ft. level from pile 2/c.....	10.7	16.8
	J. H. Hanauer #3 stope 2 cars 1/c.....	30.2	31.6
14.	J. H. Hanauer 7 cars 2/c.....	8.2	4.1
	J. H. Hanauer from pile #3 stope.....	31.4	30.6
15.	J. H. Hanauer from pile 56 ft. level 1/c.....	28.6	31.6
15.	J. H. Hanauer #1 chute 8 cars 2/c.....	9.8	18.4
17.	Scott Hanauer #1 stope 1/c.....	24.7	25.6
	Scott Hanauer #1 stope 2/c.....	3.8	7.6
18.	Scott Hanauer #1 stope 2/c.....	7.4	10.2
19.	Scott Hanauer #1 stope 1/c.....	22.	27.6
	Scott Hanauer #1 stope 2/c.....	9.8	8.4
21.	Scott Hanauer #1 stope 2/c.....	17.4	21.8
	Scott Hanauer #3 stope 1/c.....	35.6	38.2
23.	Scott Hanauer Old filling Roaring Lion.....	2.1	2.8
	Scott Hanauer stope #1 1/c.....	24.8	27.8
24.	Scott Hanauer stope #3 2/c.....	15.6	14.2
	Scott Hanauer stope #3 1/c.....	33.	24.4
	Scott Hanauer stope #3 1/c.....	36.8	30.2
	Scott Hanauer stope #1 2/c.....	20.7	20.4
26.	Scott Hanauer stope #3 2/c.....	13.8	5.2
	Scott Hanauer stope #1 1/c.....	28.4	33.
28.	Scott Hanauer stope #1 1/c.....	26.7	52.
	Scott Hanauer stope #3 1/c.....	48.4	21.6
29.	Scott Hanauer stope #1 2/c.....	6.4	17.3
	Scott Hanauer Main Tunnel fissure 18" streak.....	1.6	5.4
30.	Scott Hanauer stope #1 2/c.....	14.	26.4
	Scott Hanauer stope #3 1/c.....	40.3	25.8
	Scott Hanauer stope #3 1/c.....	28.4	22.7
31.	Scott Hanauer stope #1 2/c.....	2.8	8.
Aug. 1.	Scott Hanauer stope #1 1/c.....	18.2	25.6
	Scott Hanauer stope #1 2/c.....	2.4	8.1
3.	Scott Hanauer stope #3 1/c.....	34.4	17.2
4.	Scott Hanauer stope Roaring Lion 2/c.....	3.6	3.6
	Scott Hanauer stope Roaring Lion 1/c.....	39.2	25.2
5.	Scott Hanauer Roaring #3 1/c.....	46.3	23.4
	Scott Hanauer Roaring #1 2/c.....	16.6	29.
6.	Scott Hanauer stope #3 2/c.....	6.4	4.9
	Scott Hanauer stope #1 1/c.....	27.6	27.2
8.	Scott Hanauer Roaring Lion 2/c.....	1.6	13.8
	Scott Hanauer stope 1 2/c.....	4.3	6.0
10.	Scott Hanauer stope 3 2/c.....	6.4	8.0
	Scott Hanauer stope 3 1/c.....	37.2	16.6
11.	Scott Hanauer stope 1 2/c.....	11.4	14.3
	Scott Hanauer stope 3 1/c.....	32.	20.6

			Per cent	Oz.
			Lead.	Silver.
Aug. 12.	Scott Hanauer stope	1 2/c.....	10.7	14.6
	Scott Hanauer stope	3 1/c.....	43.2	20.8
13.	Scott Hanauer stope	1 2/c.....	7.1	13.1
	Scott Hanauer stope	3 1/c.....	34.8	17.8
14.	Scott Hanauer stope	3 2/c.....	6.7	3.6
15.	Scott Hanauer stope	3 1/c.....	41.8	21.6
	Scott Hanauer stope	3 2/c.....	11.2	9.4
16.	Scott Hanauer stope	3 1/c.....	40.1	20.2
17.	Scott Hanauer stope	#1 4 cars 2/c.....	9.1	8.2
18.	Scott Hanauer stope	3 2 cars 2/c.....	7.2	8.4
	Scott Hanauer stope	1 2 cars 2/c.....	6.4	14.7
21.	Scott Hanauer stope	1 4 cars 2/c.....	7.3	7.8
	Scott Hanauer stope	3 3 cars 1/c.....	25.8	13.
	Scott Hanauer stope	3 2 cars 1/c.....	34.2	20.2
	Scott Hanauer stope	3 5 cars 2/c.....	11.2	10.8
23.	Scott Hanauer stope	1 4 cars 2/c.....	9.6	6.4
	Scott Hanauer stope	3 3 cars 1/c.....	29.4	13.6
25.	Scott Hanauer stope	3 2 cars 1/c.....	41.	22.
	Scott Hanauer stope	1 4 cars 2/c.....	17.2	17.1
26.	Scott Hanauer stope	3 3 cars 1/c.....	40.6	32.1
	Scott Hanauer Ollus Winze	1 car 2/c.....	26.4	22.2
27.	Scott Hanauer stope	#1 4 cars 2/c.....	7.4	27.8
	Scott Hanauer stope	3 2 cars 1/c.....	47.6	21.3
28.	Scott Hanauer stope	1 3 cars 2/c.....	9.4	10.6
	Scott Hanauer stope	3 3 cars 1/c.....	43.5	23.8
29.	Scott Hanauer stope	3 3 cars 2/c.....	5.6	4.5
	Scott Hanauer stope	2 2 cars 1/c.....	43.2	22.3
31.	Scott Hanauer stope	3 1 cars 1/c.....	35.6	18.
	Scott Hanauer #2 fissure.....		22.3	13.4

357 C. P. BROOKS, recalled by the defendant, testified as follows:

I have been familiar with the Hanauer Tunnel country ever since the Hanauer tunnel was driven and familiar with the mining operations in the Hanauer tunnel and to the north of it. There was a long cross-cut called the Thayne cross-cut which ran from the Hanauer tunnel northerly at least 1,500 feet. Ore that was reached by this Thayne cross-cut was generally referred to as Hanauer ore. There are large ore bodies lying to the north of the Hanauer tunnel reached by this cross-cut. These ore bodies lie at least a thousand feet north of the ore bodies in a part of the Crescent fissure, and these ore bodies to the north are in an entirely distinct vein having no connection with the Crescent fissure.

The nearest ore body in this vein to the north of the Hanauer Tunnel is a little over a thousand feet from the Crescent fissure. The ore bodies and workings of the Roaring Lion claim of the defendant company were about 1,600 feet northerly of the Crescent fissure. That was the first place where they reached ore in the

Thayne cross-cut from the Hanauer tunnel. There is no connection between the ore bodies in the Crescent fissure and those lying to the north that I have mentioned. The intervening country is solid rock. I was familiar with the work being carried on in the ore bodies reached from the Thayne cross-cut at the time the work was going on.

THOMAS KEARNS, recalled for the defendant, testified as follows:

There is a cross-cut running northerly from the Hanauer tunnel which intersects the vein which is over a thousand feet north-ly of the Crescent fissure on the Hanauer Tunnel level. The ore that came out of the Hanauer Tunnel and out of that cross-cut is generally referred to as Hanauer ore. The ore that is reached through the Thayne cross-cut is not from the same vein as the ore in the Elephant stope.

(At this point it was stipulated that if Mr. DAVID KEITH were recalled his testimony would be to the same effect as that just given by Mr. Kearns.)

58

(*Testimony for Plaintiff.*)

FRANK ANDERSON, sworn for the plaintiff, testified as follows:

I am a civil mining engineer. I was employed by the Conkling Mining Company first in 1908, and made a survey of this property in controversy in September of that year. Mr. Treweek, President of the Company, was out there with me when I began my survey. He died eighteen months ago. He was a mining man of this state.

The dates of my surveys are as follows: My first survey, September 1st to October 3rd, 1908.

Next survey November 12th to 17th, 1908.

Next survey November 8th to 20th, 1909.

Next survey January 16th 24th, 1912.

My last survey April 12th to 26th, 1916.

I have been out to the mine once since then with Mr. Taylor on March 10th and 11th, 1917, but not to survey. When I went out there to survey in September, 1908, there were open for observation the McKay cross cut and a drift run through called the K-K drift, through which you first go to enter the stopes, shown on Exhibit 2. The part called the Elephant stope on Exhibit 2 was open at its easterly end from the part marked "filled" on the map, January 29, 1908, to the easterly boundary as marked on the map. The main stope was caved, filled with caved stuff and cribbed up, where the level went through, so it could not be entered except at a place where "chute" is marked, and that was very much filled, you could not enter the stope and that was about all. I measured that one height to the roof right about where the word "chute" is represented; outside of that I could get no dimensions on the side, on either side, and no other place in the roof. Then the joint survey stope was opened

and a survey was made of that. The westerly boundary of the Elephant stope was open at a place where the lettering "September 29, 1908," is marked.

Part of the Chute stope was open; they were working the Chute stope at that time and that was really part of the Elephant stope. That was all, I think, of the Elephant stope that was open at that time.

Q. What other stopes were you able to go into—I mean what other stopes that are marked as separate stopes on Exhibit 2?

359 A. On that date?

Q. Yes.

A. I think these other stopes were made after that time.

Mr. Brooks and I surveyed the Joint Survey stope together. It was all open and was all measured by Mr. Brooks and myself. There is no question of the correctness of the Joint Survey stope and its dimensions as given by defendant. At that time the Elephant stope could only be entered at one place called "chute." The rest was completely filled. The K-K raise was in existence at that time, but it was caved.

When I was there again in November, 1908, I surveyed on the surface and made no survey of the underground workings. The next survey I made underground was in 1909, November 8th to 20th, when I surveyed this portion colored yellow, marked "Chute" stope, and then over into what is called the Chippie drift stope, over to the part between Section- 10 and 11 which was then the face. I don't remember whether the Chute was being worked at that time. It has been worked since November, 1909, and Mr. Brooks' survey shows the working since then. My survey in 1909, was with the object of showing volume of material removed from the stopes.

My next survey in January 1912, was not in this section at all. It was up at the surface, surveying for data with respect to the apex. My next survey underground was a joint survey with Mr. Brooks, April, 1916, after the decision in this suit. Mr. Brooks has fully explained that survey.

I surveyed with Mr. Brooks the Receiver's stope.

I can tell from the records that are in evidence that the Receiver's stope was being worked from February to June, 1914. I had access to Mr. Brooks' note and checked up the work that had been platted on the maps, so that later on computation could be made for the volume of what was taken out as shown by his surveys and my surveys, so far as such computation could be made. I think it was in December I had a copy of his map taken and checked off by his notes, and had all his notes right before me. Then after that, first a map was made, then I checked off from his notes and boundaries, and found them to be correctly platted from his surveys. He had in making the map also been furnished with the notes of my surveys, so that the map was made from such surveys as both of us had made. Later on, of course, we could make no computation of these

360 stopes just from the plan map. The elevations had to be taken into account. And later he furnished me with his sections that he had made. They were rough sections at that time, running through every 10 feet apart from each other, and parallel to the end line up to the Section marked 15. Miss Block came to the office and I went through the surveys carefully with her, checking the boundaries of these stopes wherever we could find them. At that time they were not colored, but otherwise they were substantially as they are now. That is the extent to which I went in making the sections. This is a preliminary step to the computation for the volume. As far as the Section "O," Exhibit 5, is concerned, I was checking this section with Miss Block. As far as the surveys are concerned, all I had was the note of this full line from the Bench stope, to the end of this drift from the McKay cross-cut. The dotting of the lines was, of course, made by her. I had nothing to do with the Section as to whether it should be dotted to show a straight line, or whether it should curve upward or downward. That was made by her. That is the case in all these Sections. I would like to explain that as far as any point there is concerned, in order to make this computation, we had to have some line somewhere. We could not make the computations upon which we could agree unless there was some line drawn or suggested as to boundary. This explanation of the connection which I had with this Section will apply to all of the different sections. Taking, for instance, the Chute stope, as shown upon Exhibit 6, there is nothing in Mr. Brooks' or my own surveys which would indicate that the dotted line on the northerly portion of the Chute stope should be drawn as it is rather than drawn out to a square corner, as it is on the northerly end of the same stope. The last point that our surveys gave any date to is the end of the line marked "full." Where the lines are marked "full" by Mr. Brooks, there is, in my judgment, reasonable data in my surveys, or in his surveys for making them full. This is true with regard to all the sections. The same statement would hold true as to the dotted portion of the southerly end of the Chute stope.

On Exhibit 8 there is not anything in Mr. Brooks' notes or in my notes of survey that determine the roof and the floor of that stope for a distance of about 6 or more inches to be at the place where it is dotted rather than at a place above or below. This is on the dotted portion. The portion of the northerly end was determined in our joint survey, and is marked in full, and also the portion on the southerly end.

On Section 4, Exhibit 9, we calculated right to the part marked "fill," that is the ink line. We took no account of the portion 361 here which is shaded and is outside of the ink lines. This is true wherever that appears upon the Sections, as for instance, in the Receiver stope on Section No. 5. In the first two sections of the Receiver stope we made a joint survey of this stope. The bottom of it was filled with water and muck, and we determined the bottom where we struck it in these two sections to our satisfaction.

It is marked "Muck" on Section No. 2, with a dotted line at the bottom. The calculation was made down to the dotted line.

On Exhibit 6, in the Receiver stope there are lines which apparently indicate that the bottom and roof of that stope may go to the northerly, but in checking over the computation of volume we confined ourselves within the inked lines. We did not calculate beyond that, although these lines there show dotted. So in that portion of the Receiver stope marked "Cribbed" and "Filled", we did not compute any part of that which is marked "Cribbed" and "Filled".

On Section 10, Exhibit 15, in that part marked "Elephant stope" and which is entirely surrounded by dotted lines, Mr. Brooks' survey showed the northerly and the southerly boundary at December 4, 1907; that is, they would show these two boundaries, but as to the height, whether that boundary was here or down there, or this one, the northerly boundary was up here or down below, there is nothing in the notes to indicate. He indicated a northerly point and a southerly point at that particular date, but whether it was worked afterwards, of course, I don't know. There is nothing to indicate either room or bottom except by an interpolation between certain points in his ends as to the bottom in one place. That would be in Section 10, about ten feet away. He had the bottom of the stope at the top of the chute, and then we both of us had surveyed through the K-K drift, so that we knew the Elephant stope at that point did not go below the K-K drift. As to the roof, there wasn't anything at all in his notes to indicate that the roof might not have been much higher at that point than as shown by dotted lines. In making our computations we did not use these Sections at all. We assumed a height for the end on Section 5, and a height for the end on Section 14, or rather, on this line that is drawn through marked "fill". I don't think the Sections are accurately interpolated. I haven't checked them, but I don't think there was any intention to make anything more than a picture of that. There may have been, I don't know. Miss Block made them, but we paid no attention to whether the section was a rough roof or a straight roof, or what it was. We simply divided this into three portions, this Elephant stope between those Sections, and made our calculations of average heights regardless of what the picture might show. With the explanations that Mr. Brooks and I have made of these stopes, and the manner in which we have made these computations, Mr. Brooks' office and I agree as to the total volume so measured. The maps are the result of his surveys and mine, his surveys being checked by me. Mr. Brooks and I agree as to the total volume measured, 302,173 cubic feet. This does not include any part of what is shown here as the K-K drift lying easterly of the point where section 15 goes through the drift.

On Section No. 6, Exhibit 11, the face of the K-K drift, there is a place marked "Cribbed" and "Filled". It is enclosed in a broken line. This area was not included in our computation, the area marked "Cribbed" and "Filled". The part included in the computation was that enclosed by the inked lines.

JOHN C. WHITTA called and sworn for plaintiff.

I work in the mines around Park City. I worked for the defendant on the Alliance side. Was first employed there about the middle of June, 1915, and worked up until July 21, 1915. I was working in the 600 stope. That would be the stope going out from the 600 level, or No. 1 level of the Silver Hill shaft. I was stoping up from the track level, and commenced either two or three sets above the track level. The ore I was working in was mostly second class. There was at times there, the biggest part of the time, we never shipped any first class out of there at all. It was mostly second class. We would sort the first class by hand from the rock that was broken. We would separate it and ship it alone. We would get the ore down from the top of the stope to the 600 track level by shoveling it into a chute used for both first and second class. We would not use the chute at the same time for the two classes of ore. If we were working on second class and had first class to ship, we would run all the second class out, clean the chute, and then put our first class in. After I left there in July, 1915, I returned December 20, 1915, and commenced to work in the upper workings of the 600 between the 600 and 500. I was there only about two weeks. They were cleaning out the stope. It was very near worked out when I got in there.

Then I went down to the 700. After that, and after I had spent the period of two weeks cleaning up the 600 stopes I did not work in them only in filling with waste. I cannot remember the exact

363 dates. I haven't got it clear in my mind. It must have been in the latter part of January or early part of February, 1916, as close as I can remember. I was filling the 600 stopes with waste. We were getting the waste from the 900. It came from the shaft and from the 900 level. In the back portion of the stope where I was working we had it filled up within about five feet of the top. Then I went to the 704 stope. This is above the 600 level. The ore was taken out on to the 600 level and out of the mine. In this stope I was classed as a common mucker, shoveling the ore out. My duties were to remove all the ore that was blasted to ship. We had to pick out what first class we had. I received my instructions as to the separation of first and second class from Mr. O'Neill, the foreman. In the 704 stope when I went up there the ore was all blasted down, and Mr. O'Neill came up about ten minutes after I did, and he told me, he said you pick out the first class and take the pieces that average ten or fifteen pounds, and throw them to the side, the rest shovel in and let it go as second class.

I recall a survey being made in the Alliance about two weeks after I was taken out of the 704 raise and stopes. That would be some time in the early part of the year 1916. As to the appearance of the first class ore in the 704 stope, it seemed to me to contain mostly lead ore, lead-silver ore. It was black. It was good and black.

Cross-examination:

I worked in the 704 stope between two and three weeks. The place where I was working before I went to the 704 stope was all

second-class ore. I am not classed as a miner; I am just a mucker. Haven't been in the mines long enough to be classed as a miner.

Redirect:

I sorted the ore in the way I was given orders. I picked out the pieces for first class that weighed between ten and fifteen pounds. There was smaller stuff there, that I mucked in there, that could have went for first class, but it went for second class. In the 600 stopes I put a small amount of ore down the chutes, not much.

FRANK WALKER called and sworn for plaintiff.

I am a hoisting engineer at the Nail Driver mine at Park City. I worked for the Silver King Coalition. Am familiar with the work on the Alliance side known as the Columbia raise. I worked in there at one time. I was retimbering the raise. It was about in May, 1912. Mr. Blood was superintendent at that time. I was
364 working with Dave Gwilliam most of the time. I am familiar with the station at the bottom of the Columbia raise where it goes out from the McKay crosscut. We began our retimbering almost right at the station. The timbers in the Columbia raise when I went in there were square timbers. It was timbered continuously from the station where the engine was upwards where we were working. We were taking out the old sills and putting in new, and occasionally a new set, old sets and center posts, putting in new center posts all the way. I know the first drift off to the left as we go up the raise. We did the work of retimbering between that drift which on the map here is called the Custer drift, and the station at the bottom. While we were doing this retimbering we found old timbers in the bottom of the raise other than the bottom of the square sets. There was one place where we were putting in a sill. When we took out the old sill and were putting in a new, there was a kind of a soft place in the bottom there. When we came to put the new sill in we had no solid place for it, so we picked hitches in the side, put a stringer across, a longer sill, and as we picked down, down in, the water washed the dirt away, and there were two or three round stulls sticking up through the bottom. They were setting nearly straight, I should say. I couldn't remember just how much of them was exposed, probably from four inches to eight or ten, somewhere along in there. We could tell the size of them, and in a general way their angle or pitch. Their size was probably eight inches, I should say, eight inch round timbers, it looked like. I mean eight inches in diameter. I couldn't fix the point very closely between the engine and the drift at which I observed those stulls. It was below the Custer drift, or the first left-hand drift, and was above the engine in the station. Gwilliam was working with me at the time I observed this.

Cross-examination:

I worked in the raise I guess about three months. When I quit the raise was connected with the Hanauer tunnel up about 800 feet, I should judge. Somewhere around there. It was quite slow to work on account of the swelling rock and the great volume of water encountered. I couldn't say exactly where this place was where we saw the stulls sticking up. It was somewhere below the first drift to the left in the raise. The distance from the station up to the first raise, as I remember it, was probably close to 150 feet. I don't just recall where with reference to that drift we saw the stulls. I don't remember when, after quitting work in the raise, I mentioned these stulls. I probably have spoken of it a time or two since that.

It did not particularly interest me in any way. It did
365 not concern me at all. I never was asked about it. I don't remember how I came to mention it. I think I first told it to Mr. Samuel Treweek, probably three or four months ago. I was just talking with him. He did not ask me. It came about just in talking about the Columbia raise. He didn't ask me this particular question at all. I don't know as I remember just exactly what he did ask me. He asked me if I worked in there, and I can't recall any other question. I don't remember what the conversation was there. I believe he asked me if there was any stoping shown in there. If I remember right, he asked me if I worked in the stopes, or some such thing as that. I told him I never had. I don't remember anything else in particular that I told him. Mr. Gwilliam was not there at the time. The conversation took place in Park City. It was on the street. No one else was present. I had known Mr. Treweek probably nine or ten years. I don't remember whether it was Mr. Treweek I told about the stulls or not. The first one I spoke to about the stulls was Mr. W. A. Wilson. I was not mistaken when I said I first spoke to Mr. Treweek about it. I didn't say about the stulls. I spoke to Mr. Treweek about working in the raise. I don't remember when I spoke to Mr. Wilson. It was about the first of May this year. I spoke to him at Park City, at the hotel. Samuel Treweek was present. I met Treweek on the street, and he invited me down to the hotel, took me into a room there, and there I found Mr. Wilson waiting for me. He asked me no questions before he took me into the room where Mr. Wilson was about the mine. Mr. Treweek introduced me to Mr. Wilson, and I believe the first question Mr. Wilson asked me was if I had worked in the Alliance tunnel. I told him yes. I believe he asked me if I remembered in the Alliance tunnel. He asked me if I retimbered in the Columbia raise. He asked me what I was doing in the Columbia raise. I told him retimbering. He wanted to know if I had seen any signs of any old stopes around the Columbia raise. I had seen signs of an old stope. I didn't see a stope. I told him the only thing I had seen that looked like an old stope was these stulls sticking up through the bottom; that it might have been an old stope. I told him it might have been an old stope underneath, or a raise, or something like that. That is the only old timbers or anything I

could see from the raise besides the timbers that belonged in the raise, the square timbers. He did want to know if I could remember where they were, if I knew where they were. I told him I did not, I couldn't remember for sure. I told him they were somewhere

near the bottom of the raise, not very far from the bottom, 366 I don't remember just where. I have been in Salt Lake two days I should say two or three stulls I saw sticking up.

We didn't take hold of them. We tried to pick them out—tried to pull them out in order to put in sills. We did finally put in sills without pulling them out. They were sticking up in the bottom. We just naturally tried to pull them out like you would if there was a block lying there or something. We first tried to clean the bottom off. Yesterday I believe Dave Gwilliams asked me if I remembered the month we worked there. Before that he did not say anything about any old stulls, after the time we found them until yesterday. We mentioned the fact that there was old stulls, looked like old stulls, when we tried to loosen them up and they didn't come out. That would be just in the course of your work, you might mention something like that. Just as we were working [set] Mr. Blood came down from the Hanauer through there and Mr. Gwilliams mentioned it to him. He said there is some old posts or stulls sticking up there through the bottom. Blood didn't say anything, he just looked at them and went on down. He was on his way down.

DAVID H. GWILLIAMS called and sworn for plaintiff.

I am a miner. Am working at the King Con. shaft, near the Spiro tunnel. I worked in the Columbia raise on the Alliance side of the Silver King Coalition in 1912, retimbering the raise, taking out old sills, putting in posts where it needed it, and putting in new center posts all the way. My partner was Mr. Walker. We began to retimber probably two or three sets from the level, from the top of the main drift. I recall the first left hand drift as you go up the Columbia raise, known here as the Custer drift, or Level No. 1, of the Columbia raise. In going up this raise, retimbering, I noticed timbers in the bottom, below the sills of the square sets used to timber the raise. They were round posts, round timbers. I cannot recall over two. They were, I think, a trifle to the left hand side of the bottom of the raise. One of them was probably eight inches, eight or ten inches, in diameter, and the other one, I think, a little larger, if I remember right. One of them was a little more exposed than the other. One would be probably, a rough guess, about four or six inches, maybe more. The other wasn't quite so much. It was hard to see at what angle they were setting; there wasn't so very much of them to see. They were practically straight up, leaned a little to the right. They were to the left hand of the center of the raise as you go up, more to the center than to the right. I called 367 my partner's attention to it; also called the attention of Mr. Blood the same day, when he came down through. They were below the Custer drift and above the Engine station. I am pretty sure they would be below the first steep part of the raise. Referring to Exhibit 17, Section 12, I think they were below the part

marked 2612-L; I think below that turn. Just exactly where I couldn't tell. I would not try to answer that.

Cross-examination:

These timbers there didn't interest me at all, any more than mere curiosity, it being a funny place for them, I thought. Mr. Wilson was the first man I remember talking to of it afterwards, just a while ago, a month ago in Park City. I have known Mr. Wilson for a good many years, but hadn't seen him for a long time until that day. He sent Mr. Treweek for me. That is, I say Mr. Wilson sent for me, but it was through Mr. Treweek that I went. Treweek took me to Wilson, at a room at the hotel. There was no one else there. Treweek told me what he wanted me to go there for before I went. He must have found out some way I had worked in the Columbia raise. He wanted to see what I knew about that raise. He asked me if I had ever worked in the raise. Of course, I told him that I had. I cannot remember as to every question and don't know that I can answer what next was said. Before I went to the hotel there wasn't anything particular that I know of said by Treweek any more than asking about the raise, if ever I worked there. He asked me if I worked up there. I told him I had, and he asked me if I thought I could give him any information as to what was being done in there, so I told him I would tell what I knew, if I knew anything that amounted to anything, why, I would tell what I knew, that was all. Wilson asked me practically the same questions. He asked me what I was doing there, just general conversation. I told him that I was helping to retimber. I believe I volunteered what was said about the old stulls. The question was never asked me by Mr. Wilson that I remember. I told him while we were retimbering we run across those posts. I don't remember just what Wilson did say. I think he jotted it down. I think he was taking notes of it, and probably went on asking some other questions, but I don't remember what they would be. I told him where I found the posts. I told him I didn't know exactly where it was, but it wasn't very far up the raise.

368 J. H. FINNEGAN called and sworn for plaintiff:

I reside at Park City, and have lived there for about fourteen years. My age is sixty-two. I am a miner, and have worked for the Silver King Coalition. I think I first worked for them about 1905. I worked in 1906 again, and in 1907. Am now employed at the Ontario mine as a miner. I recall a time when, according to reports, a strike of ore was made in the Alliance tunnel, in what is now called Elephant stope. I was working for the company there then over on the King side. I came over from the King side to work in the Alliance tunnel, I think, about the last of March or first of April, 1907. The shift bosses were Mr. Ryan, Mr. McCann and Ben Lloyd. I first went to tracking ore up in the stopes, what they call the Elephant stope now. I think it was along about the first of April. Prior to that I had been working on the King side. There

was an incline went down there to what they call the 600 of the King. I worked in that part of the King workings that made a connection between the Alliance tunnel and the 700 level. I thought they were King workings. I do not know the name of the connection, if it had a name, but we used to call it the bit raise. It was from the 700 of the King up to the 500 of the King. That would be the Alliance tunnel level. It was a two-compartment raise and manway, the three-compartment raise. I couldn't hardly tell when that was opened up. I think it was along about the last of March or the first of April, 1907. In going to and from that work we went through the Alliance tunnel always. I don't know when they started in the King. That raise up from the 700 of the King I think they worked from the King up to the first 100 feet, where they tap this incline, then we used to work from there through the Alliance up to the 500. We used to come in through the Alliance down this incline to the 600, then raise from there up again to the 500. I only worked there about a month in that raise. That would be about a month prior to the time when the connection was made. I was mining a while and timbering a while. When the raise was completed I was sent over to the other place mining. The last work I did on the raise was as timberman. I was there when the raise was actually completed, and was engaged in timbering. Over in the Elephant stope I went to work in the first right hand drift over on what they call the Walker crosscut. It didn't have any name that I know of. Prior to the time when I went to work timbering over in the Elephant stope, ore was taken out through the Alliance and shipped from the mouth of the Alliance tunnel. Lots of ore was taken up over that little incline. I think it is called the Dailey winze, the Dailey incline. This was already made when I went there, and ore was coming up out of that. We used to pull it up in cars with a little engine. I do not recall Kneal's drift by that name. I recall a drift running to the right hand as you go into the Alliance tunnel, and remember a working called the Kneal cut-off. I did not work in that. Beyond where Kneal's cut-off comes in is what is marked Dailey winze. That goes down from this drift in the main tunnel. It is on that side drift. Ore was taken out there and shipped through the mouth of the Alliance tunnel while I was working in that part of the mine; quite a lot of it; a kind of sand gray carbonate. Carbonate ore, some brown, some gray. During the period while I was going in and out, and timbering that raise that made the connection between the 700 of the King and Alliance no ore came out from the Elephant workings that I know of. After the raise was open it came down to here, about Kneal's cut-off, and was pulled back up to the head of the raise. I don't know of it ever coming out through the mouth of the tunnel. Before this time it was stored along in drifts and crosscuts. The ore of the Elephant stope was easily distinguishable from that ore which came from down the Dailey winze, and which was shipped out of the mouth of the Alliance tunnel. All I have ever seen in there was all black sulphide ore. As a miner I could not very well be mistaken between the two classes of ore from their appearance. I

have no means of fixing the time I left the King and went to the Alliance. It was possibly the last of March or first of April. It might be a little early; it might be later. I haven't had any means of refreshing my memory as to just what month I went there. I worked in the Elephant stope from the time I went in to about a day or two before Christmas of the same year, as a miner.

HARRY STEPHENS, called and sworn for the plaintiff:

My occupation is a miner. I reside in Butte. Am in the employ of the Anaconda Mining Company. I came down at the request of the plaintiff in this case. Came down from Butte the 10th of last month, just before the beginning of this case. Have lived in Butte six years. Prior to that lived in Park City. I worked on the Alliance pretty nearly all the time I was in the Park. I started in 1901. Was working there in 1906, at the time of the discovery of ore in what was later called the Elephant stope. I was skinner. Was taking the dirt out and dumping it, and taking the cars 370 back. We used a horse. Would take the waste out and dump it over the dump at the mouth of the tunnel. The first ore that was taken out less came from in the first cross cut in the tunnel. I remember the Daylight switch in the Alliance tunnel. The ore was discovered down near the south end of the McKay crosscut. The ore stored was, I guess, put away in several drifts in here (indicating). I didn't put any in. I seen some in a drift way out from the McKay crosscut, 500 or 600 feet. I know where the Crescent crosscut and Tarbet drift are in the northeast corner of the Arthur. I saw ore stored in those drifts in the latter part of 1906. I went from there to Butte, and stayed there until July, 1907. When I came back I went to work in the Alliance tunnel in the Elephant stope. I only heard it called the Alliance at that time. I worked in the stopes. They are right at the end of the McKay crosscut. I worked up to the end of 1907, when all the young men got laid off. I remember that because I was a young chap then, a single man, and had to rough it for the winter. During the year 1907 I can't say that I saw ore in those drifts. While I was a skinner there the cars were always filled up to my knowledge. Never had any experience of the ore jumping out of the cars as we went down the track. The ore would not jump out of the cars when they were bumped together. It was too heavy for that. I used regular Alliance cars when I was there. I think they were all made at the King blacksmith shop. They used to pull them around with a wagon up to the mouth of the tunnel and in the tunnel. When I went back in 1907 as a miner I should judge there were between twenty and thirty men. They were working two shifts stoping. I think there was a wet drift running there yet. That is about all I know of in these workings. There would be twenty or thirty men on a shift in ore. They came in and out on trolleys. If I can remember, we had two big trolleys and a little one. Eight men could ride on the big trolley. We used to put a timber truck on the back of the trolleys coming out, tie them on with a rope, and put a plank

on and sit on it. I do not mean an electric trolley, I mean a hand trolley, one you sit on and pump. All the men were not able to get on these trolleys, and some of them had to walk, to my knowledge. When I came back from Butte I came back as a miner. I was the only skinner before I left for Butte on the day shift, if I can remember right. Don't think there was any skinner on the night shift. In 1907 I didn't skin very much, just odd shifts off and on. In 1906 I used to make three or four trips on a shift. We never used to be very particular, used nine to twelve cars per trip. The tunnel was down grade going out with the ore, so that we could pull
371 with the horse from nine to twelve loaded cars. No ore came out in 1906 that I knew of. There was some nice ore in 1907. It was black sulphide ore. It was not coarse. It was pretty fine. It was very heavy ore that came out from in there. When you start shoveling it you can tell how heavy it is. If I can remember right we used to get too much first class on the train once in a while, and that would bust the track. The track would just settle down, sag right down; everything, the track and the rails. I think the trouble was the ties were too far apart.

Cross-examination :

I didn't say that I took any particular notice how far apart the ties were; it was regularly five feet. They were regulation distance apart. We had to pull the first class up a hill, and if we take too much on a train, we would have to make too many trips up the hill. The cars were always pretty well filled. They must have been loaded level at the top when they were loaded at the chute, because they wouldn't be down over two or three inches when you got outside. If they were loaded up above the top there was danger of the first class falling off on the track. They weren't rounded up; they were always filled level. There were no large pieces of first class that I ever saw. If any first class fell off on the track it would not interfere with the cars because it was too soft; it would break. The car was always so loaded that none of the first class ever fell out on the track. In 1906, when I was skinner there, I was skinning practically waste. Nothing else in that year. I couldn't give you the exact day the ore was struck in the McKay crosscut, but I should judge in August some time. I think they were working in there a couple of months after the ore was struck before I left and went to Butte. They were just getting ready to mine the ore when I left. They had taken out just a few mine cars of ore that they broke. They had taken out very little ore in 1906 when I left. I didn't pay any attention as to what was done with that ore. Don't know where it was put any more than what they did take out to fill cars was put in a crosscut back there in the drift. I never took it outside. It was put in a drift somewhere. Have never seen the map before that you show me. I have seen one like it; about a month ago I guess. Tug Wilson showed it to me. No particular portion of the map was pointed out to me at that time. They made no inquiry of me when they showed me the map as to where any ore had been stored in the drift. He just

asked me if I understood where I was looking at when he showed me that map; if I knew where I was at. That is all he asked me. I told him what I knew about it. I can't tell how far from the McKay crosscut the first stored ore was that I saw. It was in two different places there. The first place I remember was all of 1,200 or 1,500 feet east of the McKay cross cut. It was just before I went to Butte I saw ore put in there. There had been very little before that. I had no occasion to know what place any ore was stored. I haven't given any thought to the subject since I returned in 1907 until about a month ago. In the meanwhile I had seen no map of the country since 1907. Not until Mr. Wilson showed it to me. In that time I had worked as underground miner up in Butte. Have been in quite a few drifts, stopes and underground workings. Had no occasion to recall in any way the Elephant stope, or the McKay crosscut, or the Crescent drift, or the Alliance tunnel until I was asked about a month ago.

Redirect:

The ore I saw was just shoveled back in the drift. The track was laid on top of the floor. There was a floor upon which they placed the ore. I guess there must have been a floor left in there when the drift was run. I saw the floor and a track on top of it. I saw the ore stored on these floors. I didn't help take it out, and I can't say I saw it taken out. It must have been the latter part of July or August, 1907, when I went back. There were two shifts working then. I think we used to figure on three trains a shift, and anywhere from nine to twelve cars per train. They had no extra shifts or extra skinners. Just used to have their regular skinners; a skinner for each shift. They had three shifts skinning, if I'm not mistaken, and two shifts working on ore. Since I came down this time I have been up to the mine. I went through the biggest part of the drifts. You can't see any platforms there now. It is caved in, filled up. One of the drifts were open when I saw ore stored before. That is the one we used to call the Crescent switch. On the map, Exhibit 1, (indicating) it is around the turn there, in what is called the Tarbet drift. There is a mark in the drift there now where the ore had been. I could see it. It went in just around the turn where you turn to go into the Tarbet drift. I went pretty near into the end of the drift. There was evidence of storing ore just around the point where you go in.

Recross:

I was there about three weeks ago. I saw evidence that ore had been stored in the drift by just the mark of the ore laying around on the side of the drift. I mean by the mark of the ore, the mark black ore will leave when shoveled up against a drift. There was no ore remaining there, only just the fine ore stuck on the side of the drift. Must have been ore there or else that wouldn't have been there. There was nothing to indicate when that

ore was put there. I had no compass when I was underground. This ore was right around the turn. I walked some distance into the working and then around a turn to the right, and saw where apparently some ore had been stored. I am familiar with the map after I get to look at it, and know where I am at. I don't know what east and west is on the map. I did not know what east and west was when I was going into this crosscut where I saw the ore stored. When I went around the turn where I saw the ore stored I could not say whether I was going east or west. I turned to the right as I was going in the tunnel.

JOHN C. WHITTA (recalled):

Cross-examination:

It was the first time I went to work in the 704 stope that Mr. O'Neill told me in sorting ore to put in first class that didn't weigh more than ten or fifteen pounds and send it out as second class. He never told me that on any other occasion when I was working elsewhere. I would judge a piece ten or fifteen pounds would be about that size (indicating), a good hand full. I did as Mr. O'Neill said. In the three weeks I was up there I shipped seven cars of first class, and I averaged from nine to twelve cars of second class a day. The machine man was present when he told me that. He was working up above me. My partner was working about twenty feet above us. I don't know as he heard him; he was the only man that was there. I don't know whether he did hear or not.

EDWARD H. PRUDENCE, called and sworn for plaintiff:

I live at Park City, and have lived there nearly thirty-nine years. Am a miner by occupation. I am working at King Con. as a shift boss. I worked for the Silver King Coalition Mines last about five years ago. I first worked there somewhere around 1903. I worked on the Alliance side in 1907. Began there January 12, 1907. I don't know the name of the place I was then working at, but it is in the McKay's crosscut now. I had previously worked out towards the mouth of the Alliance tunnel in the vicinity of the Dailey winze.

I worked a shift or two in the part of the King workings that
374 is near the Dailey winze. I was timbering in the raise. I knew Mr. Finnegan, but I did not work with him. I worked on the side raise connected that he was working on. I was in the raise which made the connection between the 700 of the King and the Alliance tunnel timbering a shift or two. I was there working at the time the raise was completed. I don't know when that was. I got a different wage as timberman from what I got as a miner. I left the timbering then and went to mining in McKay's crosscut. All the time I was working there I was accustomed to go in and out through the Alliance tunnel. During that period there was no ore taken out from the mouth of the Alliance tunnel and stored or shipped from there during the early part of 1907. It could have been night

shift and I wouldn't have seen it go out. I never saw any ore taken from what is called the McGregor workings out towards the mouth of the Alliance tunnel and shipped out through there in the spring of 1907, nor evidence of any. The character of the ore that came out through the Daily winze from the mouth of the Alliance tunnel is a kind of brown carbonate ore. The ore that was taken from the Elephant stope was black. In the spring of 1907, and up until July, 1907, no ore was taken out through the Alliance tunnel that came from the Elephant stope. When I was working in the McKay descent and in the Elephant stope, I received an extra compensation of six bits a day. That continued, I should judge, four months from January 12th. I was paid that compensation by taking a lead on a shift. I got one hundred dollars beyond that six bits a shift. It was some time later in the year I got that. That was for keeping still.

Cross-examination:

When I say there was no ore up to July, 1907, that went out the Alliance tunnel, I mean that went out the mouth of the tunnel. I didn't see any ore broken down in the Elephant stope and stored in shifts before May, 1907. I was working on ore in the Elephant stope as a miner and as a timberman. They started to work on the ore, to the best of my recollection, about the first part of March, probably. They commenced working on ore about two months before they agreed to pay me extra wages. I do not exactly remember the month they commenced breaking ore in the Elephant stope. It may have been as late as the latter part of April, 1907.

P. F. RYAN, a witness sworn for the plaintiff, testified as follows:

5 I have lived in Park City a great many years, and am now Sheriff of Summit County.

I was shift boss in 1907, and part of 1908, in the Elephant stope. I do not remember what time in 1908, but it might have been in the latter part of April or May, 1908, that I had some instructions from Mr. M. J. Dailey in regard to excluding representatives of the Conkling Mining Company from the Elephant stope; that is to say, in the portion of the stope beyond certain tags which were put up in the shift. I was told not to let those men go past those tags. Mr. Dailey referred to the men who were there surveying for the Conkling. I understood one of them was Mr. Nicholas Treweek, also Mr. Sam Treweek. So far as I know they did not go beyond the tags.

Cross-examination of Mr. Ryan:

These instructions were given me before I left there, and I left out the first of June, 1908. I worked in the Elephant stope as shift boss from May until November, 1907.

SAMUEL TREWEEK, sworn for the plaintiff, testified as follows:

I am a son of the late Nicholas Trewweek, President of the Conkling Mining Company.

My father asked Mr. Kearns if he might go in the property and Mr. Kearns refused him; but later on the 29th day of April, 1908, through the courtesy of the Silver King Coalition Mines Company my father and I and G. M. Gillette were admitted. Mr. Mike Dailey came to the portal of the Alliance tunnel and met us with a trolley. When we got a little beyond the Trewweek raise we got off. My father said "This is where my work ceased." He referred to the driving of the Alliance tunnel. We went on in to this ground in dispute, and when we got to a certain point Mr. Dailey says: "Mr. Trewweek, this is as far as you can go." My father — "I will give you my word of honor, my boy, this is as far as we will go." My father had a transit with him. Mr. Gillette and I helped him run his lines. Mr. Gillette was something of a surveyor, the same as my father was, although not a professional surveyor. I can fix the point beyond which Dailey said we should not go. It was here.

Q. What is that point with reference to the red line or the 135 foot boundary?

A. That is the old Conkling.

376 Q. I mean the place where you point on the map is the place where the red line, the 135 foot line crosses the McKay cross-cut?

A. Yes sir.

This visit and survey that I am referring to was on the 12th of April, 1908. We got an order of visitation from Judge Marshall's court on the 30th of June, 1908, so in July of that year we went all through the ground, all through the Elephant stope. We went westerly of the point where we had been stopped before. We went through the drifts, then we came back and went up the first raise. We went into different places in the stope, and find faces of ore. I remember one place where I went the ore was all of eight feet thick, beautiful ore. I remember in some places where we would go the ore would be higher, I would say 12 or 14 feet thick; then it would come down to a feather edge. But there had been an immense tonnage of ore taken out. That would be my estimate of it; what I saw there. I have examined and am more or less familiar with the maps that have been placed in evidence here. I don't remember whether we were able to go into all of the Elephant stope, marked blue on the map, because a great deal of the stope had been cribbed up. What I mean to say is that the ore had been taken out and cribbing had been put in to hold the stope from caving in. Some of the stope had been cribbed up. I mean that where ore had been taken out cribbing had been put in to keep the stope from caving in. None of it had caved at that time. My father was with me at that time. I did not go into the Elephant stope after this visit there with my father in July, before Mr. Anderson went to make his survey in September, 1908.

Q. Did you see any maps made by your father?

A. Yes sir.

I don't know whether my father made any maps or not after he had been in there in July.

When I was there in July, Mr. Critchlow, we could get in most parts of the stope, it seemed, around the edges of the stope they had put in the cribbing to keep the stope from coming in, it was still open so that you could walk around in a great deal of it; it was an immense chamber still left open but they were having a very difficult time in keeping it up. When we were then there the actual floor of the stope was visible, we were not standing on filling; there had been no filling put in there.

Q. Can you give the court any impression as to how far longitudinally, I mean from east to west, you could go along
377 the Elephant stope, either along the edges or through the center?

A. It was a long distance; I would say fully as long as you see there on the map; as I state again, the edges, they had cribbed up, filled in, and we could go the width of it.

There were twenty-five or thirty men working in the stope. Much of the ore I saw was first class, sulphide ore. I saw that it was being taken out in mine cars. They were taking it out to the King cross-cut, and taking it over there, I understood, and dumping it in bins.

My father and Mr. Parker and I were in the ground in 1911, and we made a survey then of what is called the incline. Father made a map of that survey.

Q. After 1908, in July, when were you next there?

A. Off and on, Mr. Critchlow. I would go in the mine whenever father wanted me to go; sometimes he couldn't get Mr. Gillette and I would go over with him. He never cared to go into the mine alone. I always went with some one. It was a very short distance from where I was working.

I cannot tell you how many trips I made to the mine in 1908. I visited the ground also in 1909 and in 1910, but not a great many times in 1910. It has been stated here that from sometime in 1910 or until 1913, no work was being done in this ground, and that accords with my recollection. After we received the decision from Judge Marshall's Court we understood that would end our being allowed to go into the tunnel; that was the impression I got. I didn't get any word that we would not be allowed to go in, but we didn't go in after Judge Marshall's decision until the decision of the Court of Appeals. Since that time I have been in very frequently. My father died November 8, 1915.

Since the decision of the Court of Appeals I have devoted my time to getting together evidence in this case.

Mr. Dickson: Mr. Critchlow,—I will put the question to Mr. Critchlow and Mr. Wilson both—is it not a fact that on all occasions,

since the Circuit Court of Appeal's decision, that when there has been any desire on the part of any of you, that I have promptly given consent and notified the management to let you in?

Mr. Critchlow: I assume you notified the management, because we have never had any trouble at all about getting permission at any time to go in. I will make it as broad as you please.

378 Cross-examination of Mr. Treweek:

After the decision of Judge Marshall in favor of the defendant Company we were not forbidden to go into the ground. I assumed that decision ended our right to go in.

In July, 1908, as I have said, there was but little if any caving in the ground, and after that visit we were always at liberty to go in the ground in controversy whenever we desired to do so, or to send in our engineers or anybody else.

Redirect examination of Mr. Treweek:

At the time my father and I went there in July, 1908, father kept notes of what he observed there, and everything he did. Those notes are still in existence. Personally I made no notes.

SAMUEL PERCIVAL PARKER, sworn for the plaintiff, testified as follows:

I am thirty-five years old, and have been a miner ten years. I am related to the Treweek family. I am a nephew of Col. Nicholas Treweek, deceased.

I left Park City and went to Butte in 1912, after the first trial in this case. I had been in the employ of the Conkling people then for about four years. I visited the ground in controversy the latter part of July or first of August, 1908, with Will Treweek, a son of Col. Treweek. I went in through McKay's cross-cut; took a trip through the Elephant stope. It was then about 150 feet long and 50 or 60 feet wide, practically all ore. You could go from the easterly end clear to the westerly end of the stope. There was no waste to walk on, you walked on the solid formation, I judge. I observed faces of ore all the way from 12 to 14 feet high of first class ore—that I would call first class ore. It was heavy lead ore.

Q. Can you give us any idea from that map as to where you saw this?

A. Yes sir, I can. I should think about the center of the stope, sir, a little bit further than the center of the stope. * * * It looked to me that they had gone ahead stoping, more with what I call the gut of the stope and left the wings come back here, but you could see they had used stulls. You could see the head of the stope was kind of ore in the center—

Q. If I understand you correctly, the places where you saw the faces were as you would go westerly?

A. Yes.

Q. Along the heart of the stope?

A. Yes sir. * * *

379 Ore was being taken out in wheelbarrows at that time.

They didn't have any mine cars in the stope then.

After this visit in July or August, 1908, I made periodical visits to that part of the mine for practically four years, up until July, 1912. Sometimes I might go twice a week; sometimes I wouldn't go for three weeks, etc. I saw the work that was being carried on in the Incline stope. I was down that stope. There was an immense body of ore there, lead ore. I would say it was about half first class and half second class ore.

I was in this Incline stope about the end of 1909 or the beginning of 1910. After that visit I didn't see the Incline stope again for sometime. Oh, I think it was several months. I believe I have some data on this from which I could refresh my recollection, but I haven't it with me, but when I was in the Incline stope again it was very flat.

On these various trips I made into the Elephant stope during those four years, I should say Col. Treweek was with me at least a third of the trips. Whenever he was in there he made notes of everything and packed a transit and a compass and a tape and I reported to Col. Treweek the results of all my trips. I have seen those notes that Col. Treweek made, saw them before I left for Butte. Col. Treweek packed a transit in there and made surveys before Mr. Anderson made any surveys, and after that time too, I think.

Q. Was there ever any time when you were forbidden access or stopped in going anywhere in the stope?

A. No, sir, never.

My recollection is there was a bed of ore lying above the Elephant stope, reached by going through about eight feet of lime, a large body of ore. With that exception I do not recall any workings which are not represented on these maps—if the one I refer to is not represented here. I do not know whether it is represented here or not. I have helped to get up evidence in this case, talked with a good many people, and when I found anybody who knew anything I would send them to Mr. Wilson, the Company's manager.

Cross-examination of Mr. Parker:

I was in the stopes in the four years I have mentioned between 1908 and 1912, sometimes two or three times a week. I was there at any rate every month during those years.

Q. Do I understand, Mr. Parker, that according to your recollection there was a stope lying above the Elephant stope that is not shown on this map?

380 A. I didn't say it was not shown on the map. I believe it is shown on the map, I am not sure. I say there were two ore bodies. They broke into a second ore body.

Q. When you were in the stopes the latter part of July or the first of August, 1908, was it open there or caved at all?

A. No, it wasn't caved, sir. I was in there again about a week after that, and it was still open. Perhaps than I was in there again a month after that, I believe it was open then. I believe I was in there in September, 1908. Whenever I was over there I went into all the stopes that were being worked. The stopes were open and accessible in September, 1908, anyway I believe it was.

When I first went in there this Elephant stope had been mined, I think, about 150 feet in length and for its entire width. When I was in there in July, 1908, I saw a mass of ore from 10 to 14 feet high. I couldn't tell you where it was by pointing on the map. I don't know just where this body of first class ore was. I can't point it out on the map. It was 10 to 12 to 14 feet high; I never measured it, I am just giving you a conclusion; I should judge about 10, 12 or 14 feet. It wasn't a straight back, a flat back; she would be a little higher here, a little lower here. I gave the highest point from 10 to 14 feet. I made no note of it, no measurement of it. I am just guessing, sir. That was nine years ago, sir.

I also mention the body of ore in the Incline stope. I didn't make any note at the time of what proportion was first class ore in either one of these places, or in any place in the mine. I was in every stope, I believe, that was being worked during the course of my visits from July, 1908, until the decision of Judge Marshall in July, 1910. I was in the stope frequently watching what was going on in the interest of Mr. Treweek, President of the plaintiff Company.

JAMES HUMES, recalled by the plaintiff for further cross-examination, testified as follows:

Referring to Exhibit 96 it shows that there was crude ore shipped from the 700 level, but not from the Elephant stope and not from the Conkling ground, but part of the same ore body.

Q. I call your attention to the part of Exhibit 96 which reads "Alliance first class, June 1, to December 31, 1916, crude lots 43, 68, 73, a part of 80—298, .909 tons, per ton \$38.80, AU. .025; AG. 17.81; PB. 28.6." Were those run separately and kept track of separately?

A. They were shipped separately, yes, sir; that is crude ore from the 700.

381 Q. If you kept those lots separate why didn't you keep the ore separate that came from the Conkling ground?

A. Why, I hadn't developed this matter along that far.

Q. You had developed it that far as early as June 1, 1916, hadn't you?

A. Some of our ores in the King ran high in copper; that was one of my chief reasons for shipping them separate.

Q. When you determined to ship the ore from the 700 separately, why didn't you run the ore from the Conkling ground that you were mining separately?

A. I wasn't mining the ore from the Conkling ground at that time.

Mr. Critchlow: It is agreed between counsel that the cost of mining ore during the period covered by the accounting is fixed at \$4.50 per ton.

Mr. Ray: We had undertaken to introduce those sheets. We will be relieved of that tabulation—the sheets that were produced by Mr. Dailey.

TOM LUCHINETTI, sworn for the plaintiff, testified as follows:

I am thirty years old. I am a miner. Have been for fifteen years, around Park City and Eureka.

I once worked for the defendant Company. I started to work for it the 27th of January, 1910, and worked until the 19th or 20th of April of that year. I worked right off of the Elephant stope. I think it was the Incline stope.

I have examined the map marked Exhibit 2. I remember McKay's cross-cut. I remember where the engine set at the top of the Incline which ran down about 75 feet and the bottom of which was pretty flat. I worked, I think, about a month or something like that in the Incline stope. I was mining ore; mostly first class; got very little second class in there.

Mr. Hurley was shift boss and Dan McCann was there. McCann took Hurley's place.

There was a face of ore in the Incline stope back of a line of stulls which was lagged up. It was lead silver ore. As it stood there in the ground I would say that that ore was about two-thirds first class any way.

Q. I want to show you a piece of ore and ask you how that ore compares with the ore which you saw in the face of the Incline stope at the time that you were working there?

382 A. This looks a good deal the same ore.

(Exhibit 109 shown to the witness and marked by the reporter. It was received in evidence.)

Cross-examination of Mr. Luchinetti:

I don't know when I ceased to work in the Incline stope. I worked in a good many lead silver stopes in Park City. I had no particular occasion to observe the character of the ore or what proportion was first class or what proportion was second class in any stope. That didn't concern me in any way. It is seven years since I worked in the Incline stope. I don't think I have had any reason to recall how much ore there was in the Incline stope since I left there, until January of this year when Mr. Sam Treweek asked me about it.

Q. Looking back, casting back your memory over that interval of time, do you feel that you can testify that this ore is just like what you saw in the [fact] of that stope?

A. Just about the same, yes, sir.

Q. What percentage of lead would that ore carry, do you know, what is your judgment?

A. No, I am no assayer. That piece would probably carry around fifty per cent lead.

I have seen lead silver ore in different stopes. I have seen ore that carried much less percentage of lead than this piece that had the same bright, glassy appearance. It might carry not more than one-half as much lead and yet have the same appearance.

This ore that was in the Incline stope in front of which a line of stulls had been placed could be seen by anybody, anybody could go there; that was true when I left there. There were stulls in the Incline stope there 12 feet long, some 3 feet maybe, some 10 feet. I have nothing to depend on except my independent unaided memory.

DANIEL McCANN (recalled).

Cross-examination:

I was shift boss at the time the Toole drift was being run. Toole was the foreman. He had come over from the King side to act as foreman. He had been machinist over there. He was directing the work, running in the Toole drift. When he got in about 40 or 50 feet in the Toole drift he stoped off to the left hand side, and put in square sets there. He found some first class ore on the left hand side. He came out and told us he had struck something new. He was very much elated about it. That ore was there before Toole started. He told me he had a new strike. A few days after he broke into a stope. I don't know whether there is a place on these maps where it shows where he broke into that stope or not. I didn't notice.

Redirect:

He broke through into an old stope. It was part of the Elephant stope. We got it marked down what proportion of ore was first class and second class. We marked it down, what we took out of there. I see on the map, Exhibit 3, the words "Toole stope breaks into old Chippie drift in Incline stope."

Recross:

Toole did work to the left and broke into an old stope. I guess it was the old workings of the Elephant stope. I don't know of any other stope there. It was about half a floor up that he broke in. I don't know whether it was the Chippie drift stope in the roof or not. We broke into the roof of some old stope. The Toole drift broke into the Chippie stope about half way up, as well as I can remember. The place where Toole had the find was half ways back in the drift, at about Station 3162. It is so I told Toole that I knew he did not have any new find at all. I didn't know what he was

going to break into. I knew when he broke into it what it was; I thought I did.

J. M. BIDWELL, sworn for the plaintiff, testified as follows:

I am a resident of this City and am Assistant Manager of the American Smelting & Refining Company at this place. In that capacity it is my duty to make contracts with ore producers for the purchase of their ores. I am familiar with the ore market here and have been for fifteen years. Generally mining companies producing ore contract to sell it for a number of years in the future, although some is sold on the open market. This market here is and has been all this time a competitive market. Most of the mining companies which have a steady production of ore contract it.

Ore is sold also in the open market. There would be no rule in the past ten years as to what the ordinary difference is in the price received by producers, where they sell in the open market and where they sell under contract for their entire production per ton.

(Exception taken by Mr. Dickson.)

384 There would be no rule as to any set difference between selling ore on the market and selling it under a contract. It would all depend on circumstances whether we would be as likely to get the same price or as good a price from the smelting companies where we sell on the open market, as where we sell under contract. The United States Smelting Company, the International Smelting Company, and the Ohio and Colorado Smelting Company have been the buyers during the past ten years. They have been represented by no resident agents. Sometimes there is a firm from Pittsburgh buys ore. There are also independent bidders here who might be called jobbers or intermediate agents, like Knight & Warnock and Bamberger and McMillan, who make bids for ore. Where ores are offered it has been the custom for more than ten years to submit the assays and analyses of the ore to different bidders to get their best prices. I will remember the contract, Exhibit 105, between Silver King Coalition Mines Company and the American Smelting & Refining Company. That is the regular form, and is a contract under which this defendant company sold its ores to us for a while. There are no technical terms in that contract which, in my judgment, an ordinary person would not understand. I think that any person, the court, or counsel, or anybody else, could apply that contract to a shipment of ore if the quantity and analysis are given. On the second page of this contract it reads, "Treatment charge \$15.00 per net ton of 2,000 pounds." That means dry ton, and the basis of settlement would be \$15.00 a ton at Park City. That is the way the settlements were made.

Mr. Dickson: That would include the treatment and freight, I suppose.

Mr. Critchlow: They must have paid the freight of course, f. o. b. Park City.

I don't mean that F. Augustus Heinze was ever a competitive bidder in the Salt Lake Market for the products of mines in this vicinity.

(Exception taken by Mr. Dickson.)

I never knew of his being to any great extent. He did not make a business of buying ores in this market. I don't recollect of his buying any ores in this market except through a contract made with the Silver King Coalition Mines Company. I might have known about it as a competitor, and I probably would if he had come out and bid on a good many ores.

385 (Exhibit 110, being contract between Little Bell Consolidated Mining Company and American Smelting & Refining Company, dated the second day of May, 1909, offered in evidence.)

Witness: I remember the contract, Exhibit 110. I don't think there is anything of a technical nature in that contract which would prevent the ordinary person from applying to its terms a consignment of ore which was properly weighed and of which the analysis was given. I think ores were received and paid for by my company under this contract.

(Exception taken by Mr. Dickson.)

The Little Bell Consolidated Mining Company's property from which ore was produced is situated in Park City. I cannot say whether I have ever seen the contract, Exhibit 107, or not. I can say without question that I am familiar with what is commonly known as the Heinze contract with the Silver King Coalition Mines Company, made in 1909, to run for ten years.

Mr. Critchlow: Mr. Dickson and I agree that this which is embraced in Exhibit 107 is a correct copy of that contract.

Q. I have introduced here an Exhibit 107, Mr. Bidwell, this contract, which is agreed by counsel to be the so-called Heinze contract with the Silver King Coalition Mines Company, dated May 21, 1907, and to run for a period of ten years from January 1, 1909. This exhibit shows that this contract was assigned by Heinze to the Miners Smelting Company. Did you ever know of the Miners Smelting Company having any plant in this vicinity?

Witness: I think they bought a plant at Milford. I don't know whether it ever ran or not. I think it did run for a while. I don't know as to whether it was after Heinze bought it. I don't know that it has been for the past ten years a running plant as a competitor for the purchase of ores in this vicinity.

Mr. Critchlow: It is agreed that if the paper is not in evidence, there is a document which assigns the so-called Heinze contract to the American Smelting & Refining Company.

Mr. Dickson: Yes. I have never seen it, but I am sure that is so, from information that I have. Mr. Bidwell doubtless would know.

386 Witness: I believe it is so that ores from the Silver King Coalition Mines Company during the whole period since January 1, 1909, have been delivered to the American Smelting & Refining Company under its purchase of the so-called Heinze contract.

If there was ever a consideration given the estate of F. Augustus Heinze or the Miners Smelting Company for the purchase of these ores under the Heinze contract, it was all done, not in the Salt Lake office, and I don't know just what the consideration was.

(Exception taken by Mr. Dickson.)

I don't know that there was a consideration really. It is fair to assume there was some consideration. I don't know how substantial it was or what the consideration was. That Heinze contract, Exhibit 107, would be considered a valuable contract. The period of ten years for a contract for the purchase of ores would not be considered unusual in Park City. We have had other contracts for similar lengths of time. We have one contract on our books for thirty years from a mine. That does not provide graduated smelting terms, but of course the New York market for the metals governs. We do not very often have a provision in a long contract of that kind for a readjustment of the smelting charge scale. We have none in that thirty-year contract; that is flat. I wouldn't say it is a different kind of contract than the Heinze contract, but a different kind of ore. I recognize contract, Exhibit 104, between Silver King Mining Company and American Smelting & Refining Company, which ran until April 1, 1909, as a contract under which the Silver King Mining Company, and afterwards the Silver King Coalition Mines Company, marketed their ores with us. I don't think there is anything about that contract which is of such a technical nature that the ordinary person would not be able to apply the contract to the shipment of ore, the quantity being known and the analysis of the ores.

(Exhibit 111, which is a contract dated May 25, 1911, between Silver King Consolidated Mining Company and American Smelting & Refining Company, offered in evidence.)

Witness: That is one of the contracts made by our corporation, but that ore is not now being marketed under that contract. The ore was marketed for a period under that contract. A new contract has been entered into. This contract was extended only until May 25, 1913, and subsequently a new contract was entered into.

387 We have in our office the new contract under which we are now purchasing their ores. There is nothing in that contract which would prevent a person that was in the habit of making ore settlements from applying the terms of the contract to a shipment of ore, the weight and moisture and analysis of the ore being known, and the current quotations for the metals being known. It might require the service of a person in the habit of making ore settlements to compare that contract with one of the other contracts which have

been shown. In other words, an ordinary person, not accustomed to that business, might not be able to do it.

(Exception taken to Exhibit 111, by Mr. Dickson.)

I think there has been some modification of the terms of the Heinze contract, but I am not sure.

Mr. Dickson: Whatever modification there was, the ore settlement sheets would show just what we did pay, and what we received from the smelters.

Mr. Critchlow: Your account does not purport to charge us any particular amount. You leave a flat rate of \$32.25 for the ore.

Mr. Dickson: Whatever the charge was for freight and treatment charges by the American Smelting & Refining Company, that, of course, would be deducted from what the ore-shipment realized. We have charged ourselves with every dollar we got, whether we paid \$14.00 or \$15.00, makes no difference. We have only charged you with what we got.

Mr. Critchlow (to witness): It is now suggested, and you yourself think there has been some modification?

The Witness: I do not remember. You asked me about the Heinze contract. I do not know that there has been any change in the Heinze contract. I don't remember just what the treatment charge would be right now.

Mr. Critchlow: I have introduced here as Exhibit 107, Mr. Bidwell, this contract which it is agreed by counsel to be the Heinze contract with the defendant Company, dated May 21, 1907, and to run for a period of ten years from January 1, 1909. This exhibit shows that this contract was assigned by Heinze to the Miners Smelting Company. * * * It is agreed that if the paper is not in evidence there is a document which assigns the so-called Heinze contract to the American Smelting & Refining Company.

Mr. Dickson: Yes.

388 (Witness, continuing:) It is a fact that ever since January 1, 1909, the defendant Company has been disposing of its ores to the American Smelting & Refining Company under that so-called Heinze contract.

Cross-examination of Mr. Bidwell:

Prior to the time the so-called Heinze contract went into effect the ores of the defendant Company were marketed under what was called the Old Silver King contract, which was dated the 19th day of September, 1903, and which was in effect until the Heinze contract went into effect. All the ore shipped by the Silver King Mining Company and the Silver King Coalition Mines Company were shipped under these two contracts to the American Smelting & Refining Company.

Both the Silver King Mining Company's contract and the Silver King Coalition Mines Company's contract with Heinze have already been introduced in evidence as I understand.

(They are exhibits 104 and 107 inclusive.)

SAMUEL PERCIVAL PARKER sworn for plaintiff:

I am thirty-five. I am a miner. Have followed that business ten years in Utah and Montana. I reside at present at Butte City. Have been living there five years. Lived at Park City prior to that time. Have been in this country ten years. Came from Swansea, Wales. I am Mr. Treweek's nephew. I followed mostly shaft work for quite a while in Butte. I am contracting. I work for day's pay and also work for contracts. During the time I lived in Park City I was in the employ of the Wabach Mining Company, the Daly-Judge, the Daly West, the King Con. and in Col. Treweek's employ. Just prior to the time I went away, in 1912, I was still in the employ of Col. Treweek. The first trial of this case was just after I went to Butte. Had been in the employ of Col. Treweek about four years before I went away, but not constantly. Went into the Conklings property about the end of July, or the first of August, 1908. I was with Will Treweek.

That is another son of Col. Treweek. That is the first time I ever went in the Alliance tunnel. I went through the Elephant stope at that time. I never had attempted to go in this mine prior to the time the order of survey was given by the court. It was the end of

July or the first of August, 1908, that I came in through the
89 Alliance tunnel, in through the McKay crosscut, and took a trip through the Elephant stope. I should judge by the length of the stope at that time it was a stope about a hundred and fifty feet long, and I should think about fifty or sixty feet wide. The formation of the country looked as if it was in the lime, lying very flat, and it was practically all ore. What little waste there was or that didn't look very good ore was lying in the foot, and the stope would average from ten to fourteen feet high, and going through the center of the stope it would be about fourteen feet high, nothing but a solid mass of first class sulphide ore. That was about 150 feet long, I should judge, and about fourteen or fifteen feet wide. We entered the stope from the easterly end. I went into the K-K drift. As you go into the K-K drift the ore lay practically right in the foot. I did not observe any understoping of ore at this point. We could go from the easterly and clear to the westerly end in this stope. We walked on solid formation. I could figure the edges out. They were timbered, little cribbing to hold them up in some places. In the center of the stope there was quite a high crib, necessary to hold the stopes so it wouldn't weaken and come down. I practically examined the ends, and I practically examined all the sides as far as accessible with the timber being in the way, but not very much. At that time I observed faces of what I would call first class ore. It was a heavy lead ore. I should think I saw this about the center of the stope. It looked to me that they had gone ahead stoping, more with what I call the gut of the stope, and left the wings come back here, but you could see they had used stulls; you could see the head of the stope was kind of ore in the center. The places where I saw the faces were as you would go westerly along the heart of the

stope. That was about all the stoping that was done there in August. A little later we observed that they had broke through a bed of lime about what you would regard as the roof of the Elephant stope, as that stope is shown on Exhibit 2. It was about the foot of the K-K raise. I am familiar with the K-K raise from having been in there since. I should say it was about twenty or twenty-five feet west of the foot of the K-K raise. You got up to this upper stope by a temporary ladder. I put it there myself. When we got up to the top we went through a body of lime. I should say it was about eight feet thick. Then we came into another body of ore laying identical with the first body of ore. It was a very extensive ore body; I should say from twelve to fourteen feet high. Cannot give any idea as to the lateral extent of it at that time. After that they stoped it right out, but it wasn't stoped right out then. After different periods
390 later I went up into that same place. When I first went up there were men working there. They got up there with a ladder, I guess. They had a chute around here. The chute ran from this ore body down to the Elephant stope. You would get in from the first stope to the second. There was no permanent ladder there then. They had some kind of a slide for the ore to go down. The slide was a few long planks spiked together, a temporary chute. It was made two by ten with two sideboards on them. That slide went up that same hole the temporary ladder was I climbed. There was about six or eight men working up there. The ore was being taken out from the Elephant stope through the K-K drift. The ore that was being taken out that was being worked at the westerly end of the Elephant stope was taken out in the same way. They would wheel it in wheelbarrows. I never saw any mine cars in the stope. I made visits into the mine periodically between July, 1908, and July, 1912. Sometimes I might go twice a week, sometimes I wouldn't go for three weeks, and so forth. I was down the Incline stope and saw the work that was done there. The Incline I have reference to is the one marked "incline" and extending from section 4 to section 7 (indicating). I went down the Incline stope about the end of 1909. The incline was sunk about seventy-five feet on a fifteen degree pitch. It was very flat and all in ore. There was a track in there, and there was an engine where they pulled it up. It was down at the foot of the incline, east a little way, and there was an immense body of ore here (indicating). I should judge it was about sixteen or eighteen feet high. It was lead ore. I should judge it was about half first class and half second class. It was being stoped. I think there were about six men working in there. That was about the end of 1909 or the beginning of January, 1910. I am not sure what day of the week. After the journey when I saw the ore being mined there I did not see the Incline stope after it had been extended to a further distance east for quite a while. I think it was for several months. I have some notes and data at the hotel. When I was down the Incline stope the next time I went to the bottom. It was laying very flat. When I made a subsequent visit they were still working in the Incline stope. I should say there were about six to eight men working in there. That was a large stope, quite a large

body of ore, about twelve to fourteen feet high, in places not so high. Off to the edges it feathered down. I couldn't recollect whether I ever saw any face of ore off at the easterly edge of the stope. I was never in any other stopes during the period between 1908 and 1912, except the Incline stope and the Elephant stope. I should
391 say Colonel Treweek made at least one-third of the trips into the Elephant stope with me in those four years. He made notes of what he saw when he went, and packed a transit and always a compass and a tape. I reported to Mr. Treweek the results of my trips. Before I left for Butte I saw the notes which Colonel Treweek made from time to time, and which I saw him make on those trips. I have not seen them since I have been this time. I don't know how many times he packed the transit in there, perhaps a dozen. I am not sure whether it was before or after Mr. Anderson made his survey, I think after. I did not accompany Mr. Anderson when he made the survey in the fall of 1908. I never accompanied Mr. Anderson upon any of his trips to survey. There was never any time I was forbidden access or stopped in going anywhere in the stope. With the exception of the bed which I have attempted to describe as lying generally in the easterly part of the Elephant stope and above it, I remember no workings at all which are not represented or attempted on the map. The one above the Elephant stope is the only one, I think, is not represented on these maps. I don't know whether it is represented here or not.

Came down here from Butte about the 9th of last month. I have spent most of my time since coming down at the Park, going through the workings there. Anybody that I knew that worked in there, or found out anything he knew, I would send them to Mr. Wilson. I have myself talked with a good many men and sent them to Mr. Wilson. I know Mr. Frank Hanson, and had a talk with him amongst other witnesses. I first became acquainted with him last Tuesday night, just exactly one week ago tomorrow. To my knowledge had never seen him before that time. He was introduced to me by William Treweek, the son of Colonel Treweek. Mr. Hanson stated to me at that time that there were assay books of his which had been brought down to Salt Lake for use as evidence in this case. He also stated to me that the assays shown in those books were fakes. He stated to me that his uncle had had trouble with Tom Kearns, and that if it could be made a consideration to him he would go upon the stand and so testify in words to that effect; and asked me whom he should see with regard to making arrangements for his testimony. I told him I would go around and see Mr. Critchlow, and that I would be back the next night.

Cross-examination:

After my first visit to the mine in July, 1908, and until the decision of Judge Marshall, in July, 1912, I made numerous
392 trips periodically, sometimes two and three times a week and then perhaps I wouldn't go there for two or three weeks. I wasn't there every week two or three times. Sometimes there were two or three weeks when I wouldn't be in there.

I was there about every month. I didn't say there was a stope lying above the Elephant stope that is not shown on that map.

I believe it is, I am not sure of it; I don't know. What I do say is that we broke into a second ore body. There were two ore bodies. I was in that stope about the latter part of July or the first of August. It wasn't caved at that time. It might be a week after that I was in there again. It was still open. I don't know when I was next in there, maybe a month. I believe it was still open. I believe I was in there as late as September, 1908. I don't recollect whether it was then open. I believe I went into all the stopes that were being worked when I went over there. I couldn't tell anything about Mr. Anderson making a survey. I don't know whether the stope was still open when Mr. Brooks and Mr. Anderson made a survey in September, 1908. I believe the stope was open as late as the last of September, 1908. From September to December I couldn't say whether it was still open. On my last visit before the first trial in 1912 the stopes were caved then. It might have been the latter part of 1908 I saw it open. I believe there was an old chap called Burns that worked in there. I do not know his first name. I do not know how far westerly this Elephant stope had been mined out when I first went in there. I should think it had been mined about 150 feet as far as I can recollect. It had not been mined its entire width. There was ore still there. It had been mined about 150 feet in length. It had not been mined for a distance of at least 110 feet from side to side. The wings of ore were left on the edges when I went in there, and they were stoping the gut out. That was the first class ore. I saw first class ore right in the center of the stope, as we come longitudinally. I mean the center in an easterly and westerly direction. I saw a mass of first class ore from ten to fourteen feet thick about July, 1908. I don't think I am mistaken about that. Where I saw those bodies of first class ore ten to fourteen feet thick was about the center around here, I guess (indicating). I was in the stope frequently. Have looked at the maps since I have been in town, but have never examined them. Have not been in court daily since I came down from Butte. Was in Park

City a couple of weeks. Have been in here a number of days
393 when these maps were hanging here. I have never examined these maps. The place where I found that great mass of first class ore was about in the center from the two ends. It would be about 150 feet long this way, westerly of the easterly portion of that stope shown on this map (indicating). Just brings it to the west end line of the Conklings, and there is where I saw this mass of ore. I don't know how long it was. I saw the face of it. There was a little ore back of it, about ten or fifteen feet easterly, I should imagine. I never measured it; I am just giving you a conclusion. I should judge it was about ten, twelve or fourteen feet. It wasn't a straight back, but a flat back. It would be a little higher here, a little lower here (indicating). I gave the highest point. I made no note of it. I am just guessing; made no measurement of it. That was about nine years ago. Saw a body of half first class and half second class ore down at the foot of this incline wing, I believe,

the latter part of 1909, or early part of 1910. I made a few trips there afterward. There was still a large face there for a while. I made no note at the time of what proportion was first class in either of these places, or of any place in the mine. I sometimes reported to Mr. Treweek over the telephone, and sometimes by writing. I made a report to him in writing stating there was a place in the Elephant stope where there was a thickness of ten or fourteen feet of first class ore. I don't know where it is. I don't know of any other place where mining was being done in 1909 other than the Incline stope. I was in the stope frequently watching what was going on, in the interest of Mr. Treweek, President of the plaintiff Company. When I made these visits I would go into all the stopes I could get into. I can't recollect ever being in the Joint Survey stope. I don't know the name of those stopes. I believe I was in every stope that was being worked from July, 1908, until the decision of Judge Marshall in July, 1912. In the latter part of 1909 this stope here (indicating) was being worked. That is the only one I know of. There was no other place than the Elephant stope and the Incline stope that was being worked in July, 1908, when I was there. I know of no others in 1910.

Those stopes are the only ones to my knowledge that were being worked on any of my visits. I spoke of a temporary ladder that went up. There was not necessarily a raise to put the ladder in. I wouldn't call it a raise unless it was timbered. I would call it a hole in the back if it wasn't timbered. There was a raise that started near Station 1857 on this exhibit, along in here somewhere (indicating). I didn't know of any Station 1856. I don't see the hole in the roof where the ladder was represented on this map. I saw that about July or August, around there. I do not know of Mr. Anderson having made a survey after that in that same year. I might have heard of it, but I forgot it.

Tuesday, June 12th.

The first class ore I found ten to fourteen feet high would dwindle down to about six inches to a foot on the side, and a gradual thickness until you got to the center as the walls came together. I was in there so frequently in the interest of Mr. Treweek. I observed what work was being done, but I never made a measurement. Mr. Will Treweek introduced me to Mr. Hanson in the Oak saloon at Park City. Mr. Treweek and I were talking when he came in. Mr. Treweek was talking to him about a minute or two before he introduced me to him. He said, "I have seen you around here a long while; you were down over this law suit of the Conkling?" I told him yes. I don't know how he knew. He had seen me around there. I guess he made inquiries. He said he would like to speak to me a minute. We went up to the other end of the bar and he said, "I am the assayer at the Silver King. The assays that come out of the Receiver's stope are nothing but a fake and hearsay on my part." I asked him if he would get on the stand and swear to that. He said, "Well, there will have to be a consideration." I told him I didn't

know about that. Told him I would go down and see Mr. Critchlow and put the thing before him. I told him to be there at nine o'clock the next night and I would meet him and tell him what Mr. Critchlow said, but he wasn't there. I think he came to Salt Lake the next day. I think Mr. Will Treweek had known Mr. Hanson for years, speaking acquaintance. In fact, he told me he knew him. I never met the man in my life to my knowledge before that. He told me he was in the employ of the Silver King, and had been about two years, I guess. I did not say to him that Mr. Kearns had not treated some of his relatives right, and that if he would help the Conklings Company he wouldn't lose anything by it. It was the other way about. He told me that Mr. Kearns hadn't treated his uncle right, and he would like to throw it into him.

Redirect:

Mr. Hanson, in this conversation, told me that there were assays came out of the Receiver's stope that would make my eyes stick out a foot.

395 Recross:

When Mr. Hanson said the assays would make my eyes stick out a foot, I said, "That's good." I did not ask him how great the assays were, I thought I would leave that to Mr. Critchlow. I was interested in it. I would certainly like to have known. I didn't ask him anything about what the grade was. I thought I would leave that to Mr. Critchlow.

WILLIAM J. LINDBERG, a witness produced by the plaintiff, testified:

Direct examination.

By Mr. Ray:

My name is William J. Lindberg; reside at Park City; am a mining and mill man, have been for about 17 years. Worked several times for the Silver King Coalition Mines Company; worked on the Alliance side. Think I remember a stope called the Receiver's stope. Haven't examined any of these maps.

(Witness examines Exhibit 3.)

Referring to the area on the map as the Receiver's stope, going around from the main Elephant stope and extending over towards the Toole drift, on the right-hand side of the McKay cross-cut going in from the outside, I think they called that the Receiver's stope. I worked in that stope and when I was there the ore was principally first class. At that time there might have been twenty men working there, might have been thirty. They were all working in ore at that time, except two or three timber men. There might have been 20 cars of first-class ore per day per shift gotten out; maybe some shifts

maybe thirty cars; might have been ten or fifteen cars of waste, would vary, but the principal part was first class.

I remember the Toole drift, worked in it. The shift boss in the Toole drift at that time was Dan McCann and a fellow named McDonald. Mr. Humes was superintendent on the Alliance side then. There were two of us working in the Toole drift. We were working in first and second class ore; would get out about a couple of cars second class, couple of cars first class per shift. Three shifts working in the Toole drift. I believe three shifts were working in the Receiver's stope when I was there. Remember while working in the Toole drift of breaking into an old stope; was working in a drift; that was on the right hand side going in towards the station; on the right side, the Toole drift side. Broke into the stope about 60 feet in, kind of the side. Didn't have a full face of ore at the time we broke in, had some ore. I never skinned in the mine there; was a miner, single-jacking.

Cross-examination.

By Mr. Dickson:

I worked in the Receiver's stope about 1909; worked there a couple of times. Think it was 1909; lots of times in other stopes we would work a few months there and a few months there, wasn't particular. Worked in the Toole drift in 1914; should judge about six months. There was ore pretty near right where they began to drift, just a few feet on west, then they broke into ore, and from there right into where we broke into the old stope about 60 feet; that was the drift that went in about 60 feet. At the end of the 50 feet or thereabouts we went about twenty or twenty-five feet, I should judge, before we broke into the old stope on the right hand side. There we had first and second class ore. I worked in the Receiver's stope from 1909 six or seven months. When I was there Frank Dailey was foreman on the Alliance side. Toole wasn't foreman when I was working in the Receiver's stope, neither was Longmeyer, nor O'Neill. The ore was taken out of the Receiver's stope and handled in cars. The only places I know where the drift was low is where the swelling ground washed the timbers down and hadn't eased them off; that is the only way I know. I worked in a stope where they had to run wheelbarrows. I remember the men objecting to working there because of the difficulty of getting the ore out; it was a pretty gassy place, so, if you call that difficulty. I guess the stope must have been 18 feet high, in places, 20 feet. In the stope I have in mind the ore was wheeled and shoveled out, and taken out by mule trains. Some places had small chutes and run it in a wheelbarrow and dumped down chutes.

I am pretty sure it was in 1909 I worked in that stope. I believe there was three shifts they worked. When I was working in the Alliance they was working in ore all the time; they worked three shifts on the Alliance side on ore.

MATHE W. SHERLOCK called and sworn for plaintiff:

My occupation is mining. I have worked for the Silver King Mining Company. I know where the 500 station is connecting the Alliance side. I worked there loading ore out of chutes. I was there in 1905, 1906, 1907 and 1908. I loaded no waste out of there in 1907 and 1908, or at any time after the chute was built and the ore bins were built.

397 Cross-examination:

I worked there from 1905 up to 1908. It might have been in the middle of 1908 I was moved out of the 500 down to other places. I know I worked there for seven or eight years. I haven't any clear recollection as to what time I quit there. I worked there as far as 1914. Never worked any more since. I went to work in 1905 on the King side. I didn't work much in the Alliance at all. There was an ore bin there in 1908. There was an ore bin on the 500 at the Silver King shaft. There was ore taken out of the ore bin on the 500 level in 1905 and 1906. It came in from the level and dumped down on the five. I guess there was some ore being dumped in 1908. It is a long time ago; I can't recollect. I was loading from the chutes from the 500 of the King.

Redirect:

I remember that after the ore bin was built there I was a loader on the 500. It may have been four months that I was there; may be from May or June until July. To my knowledge I took out no waste there. It was second and first class there.

Recross:

I loaded no waste out of there in my time. As to whether any waste was sent out I couldn't say; I know I took none out in my time.

CHARLES MANGUNSON called and sworn for plaintiff:

I reside at Park City and am a miner by occupation. Was employed on the Alliance side of the Silver King Coalition property as a skinner during 1908 and 1909. Was taking the ores from the stope to the King side. The big cars were used in removing the ore. There were no small cars used. I never saw any small cars on the Alliance side when I was there.

Cross-examination:

I worked there thirteen months. I don't know how far the stoping had progressed when I quit because I never went into the stopes.

Redirect:

I was taking this ore to the 500 of the King, and took the waste outside of the dump. I never took any waste to the bins on the 500.

Never knew of any being taken there while I was a skinner on the Alliance side.

398 Recross:

I was dumping in the ore bin at the Silver King shaft on the 500 level. In 1908 we were dumping in the raise to the 700 in the King; in 1909 we were dumping from the ore bin of the five. I don't remember what time in 1909 they started doing that. It did not concern me whether I took first class, second class or waste out of the mine. I was not interested.

WILSON A. HOWARD, a witness produced by the plaintiff, testified:

Direct examination.

By Mr. Critchlow:

My name is Wilson A. Howard; have resided in this city 20 years; have been employed for a great many years by the United States Smelting & Refining Company, hold position of ore buyer; have been managing the ore buying for about two years and a half, have been assisting for four or five years; have been connected with them for the last ten years. As ore buyer it is my business to negotiate contracts for the purchase of ores, and to purchase ores in the open market where they are not offered under contract. There is competition in the Salt Lake market between various smelting and refining companies for the purpose of buying silver lead ores, and has been for ten years.

Knight & Warnock of this city are independent ore buyers.

(Contract of Wilbert Mining Company with Knight & Warnock, marked Exhibit 112, was offered in evidence, to which offer Mr. Dickson excepted.)

I know the Wilbert Mining Company and in a general way; its lead-silver ore was shipped from Idaho into this market. The United States Smelting & Refining Company received the ores from Knight & Warnock furnished under this contract. The terms of the contract are familiar to me, and settlements were made under this contract. I could find no contract with the Wilbert Company antedating this contract, Exhibit 112. I have no recollection of shipments coming prior to the date of that contract; the mine, I don't think, was operating to any extent.

This contract, Exhibit 112, was handed to me yesterday, and at the same time, Exhibit 107, also two settlement sheets of the American Smelting & Refining Company for the Silver King Coalition Mines Company ores. I only compared it with the contract with the Silver King Mining Company, not with the other. I did not
399 figure up that lot of ore under both contracts. Under Exhibit 107, any ordinary person unskilled in ore buying could

compute the value of the lot of ore under the Silver King Heinze contract, Exhibit 107.

That lot of ore of May 16, 1914, represented by Exhibit 114, is not figured under this contract; there are two items that are different, some modification apparently; treatment charges reduced from \$14.00 to \$13.00, and the copper item has also been changed, as figured under the settlement it is not the same as given in the contract. With the two changes mentioned that lot of ore represented by Exhibit 114 would be worth under Exhibit 107 \$63.19 per ton, the same as in the settlement sheet itself. The gold and silver payments are the same in both contracts; the lead item in the settlement is figured on the basis of 90 per cent of the lead—at 90 per cent of the New York; under the Wilbert contract the lead is paid for on the basis of 90 per cent of the lead, less one cent off of the New York quotation. The lead is 42.05; we deduct 10 per cent from that assay, which gives 37.845 per cent. Then reducing that to pounds by multiplying by 2,000 gives 756.9 pounds, New York quotation used in settlement 3.9, one cent off that leaves 2.9 to be paid to the shipper. Which gives \$21.95 for the lead. The copper payment in the Silver King contract is less than .9 of one per cent.

In the Wilbert contract it is less full one unit. The settlement assay is 1.225; deduct one per cent leaves .225 to be paid for under the Wilbert contract. $4\frac{1}{2}$ pounds less five cents off the New York price, which is 13.9 in the settlement, leaves 8.9 cents per pound against $4\frac{1}{2}$ pounds, 40 cents per ton, which gives a total metal value of \$71.36 per ton, of which

\$10.89 is gold;
\$38.12 silver;
\$21.95 lead;
40 cents copper.

The Wilbert contract penalizes the different elements of the analysis separately. There is no flat treatment charges; the iron is also paid for separately; the insoluble zinc and iron contents are not shown in the settlement. Treatment charge in the Wilbert contract is nothing on 40 per cent lead, with a credit of ten cents for each unit of lead over forty and deduct ten cents for each unit of lead under 40 per cent. The lead assay is 42.05, which leaves a bonus on the treatment of 21 cents per ton.

Sulphur is penalized in the Wilbert contract at 25 cents per unit.

There are $7\frac{1}{2}$ units of sulphur in the settlement, which makes a penalty of \$1.88, that is, a credit. The balance of the analysis would be the insoluble zinc and iron contents. With a high lead content there would be very little if any of the other items to speak of entering into that assay; I would say not to exceed 10 per cent of any of them. Figuring insoluble 10 cents per unit, ten units would be a penalty of \$1.00; figuring iron at ten cents per unit, ten units present in the ore would be a credit of \$1.00. Zinc is 10 per cent allowed free, so there would be no penalty, making a total penalty against insoluble and sulphur \$2.88; total credit

of iron and treatment of \$1.21, leaving a net penalty in treatment of \$1.67, which amount would be deducted from the gross value of the metals in the ore, leaving \$69.69 per ton f. o. b. the smelter; the shipper pays the freight.

I think the freight rate from Park City to Salt Lake on this grade of ore is \$2.00 per ton. Add \$2.00 to the net amount per ton shown on the settlement before me would make \$65.19 per ton under the Heinze or A. S. & R. contract, and would be the same as deducting \$2.00 from the \$69.69 under the other contract, making a difference between the two of \$4.50 a ton.

The settlement price under the Wilbert contract for the lot of ore shown in Exhibit 113, leaving out the freight, is \$67.96, using the same method as we did on the other; putting in the freight would be \$65.96, being \$4.00 more than the settlement gotten under the contract.

The contract you show me between Wilbert Mining Company and Knight & Warnock, dated February 17, 1915, is the same as assigned to our company in every respect with the exception possibly of a slight variation in the treatment charge of a few cents per ton. In general terms it is the one under which we are making settlements at the present time with the Wilbert Mining Company.

The terms are not exactly the same, but the same method is used in figuring.

(Exhibit No. 115 offered in evidence, to which counsel for defendant excepted.)

Cross-examination.

By Mr. Dickson:

I didn't find any penalty on zinc in the Heinze contract; in the Wilbert contract 25 cents per unit is charged, providing it takes the maximum. There is no charge in the Heinze contract for insoluble. In the Wilbert contract zinc 10 per cent allowed free; over 10 per cent thirty cents per unit; speiss, 5 per cent allowed free, over 5 per cent, 20 cents per unit. Sulphur, 25 cents per unit. Maximum charge \$2.00 per ton on the sulphur. One per cent of sulphur would be penalized 25 cents.

In the Heinze contract there is no penalty for speiss. Ore, under the Wilbert contract, Exhibit 112, which contained 20 per cent zinc, would be penalized \$3.00 for zinc, and if there was eight or more per cent sulphur, the penalty would be \$2.00; making five dollars for those two items that the ore purchaser would not have to pay under the Heinze contract, that he would have to pay under the Wilbert contract, and in the Knight & Warnock contract it provides for the same penalties in insolubles, zinc, speiss and sulphur as does the Wilbert contract.

On the first Wilbert contract a shipment of ore carrying in lead 25 per cent only the treatment charge on lead would be \$1.50. There are two Wilbert contracts, one succeeds the other.

When I said the copper had not been settled for in accordance with the terms of the Heinze contract I had reference to both exhibits. The Heinze contract, as I recollect it, calls for payment for copper on over 1.3 per cent deduction off of the wet assay, and the payment is at the rate of \$1.00 per unit for the excess over 1.3 up to four per cent; there is a different basis for payment over four per cent. The settlement on both of those lots is on the basis of 1.9 of one per cent off the wet assay, less four and a half cents off the New York quotation. I think the modification makes it more favorable to the Silver King Coalition.

The settlement that was in fact made was more favorable to the mining company than would have been a settlement under the contract.

Redirect examination.

By Mr. Critchlow:

Twenty per cent zinc ore would not be valuable for its zinc contents in lead smelting; not sufficiently high to warrant shipment to a zinc smelter; they are not interested in ore running under 35 per cent as a rule.

Under the Willert contract it would not be profitable to the mining company to ship or market zinc ores.

402

JACK EDDY called and sworn for plaintiff:

My occupation is miner. Am now employed at the Daly-Judge mill at Park City, Utah. Was once employed at the Silver King Coalition Mines Company. I am familiar with that part of the mine referred to as the Alliance side. I was a skinner there in 1907. I was working down at the Y switch. Was taking the ore to the King chute, 700 chute—taking it up the drift and dumping it down the 700 on the King side. Charlie Ely, Jim Johnson and Gibson brought the cars to me. There were three skimmers. They were working three shifts. I was day shift. They would bring from ten to twelve cars down to me in a train. I would not take a full train up the Kneal drift. I would take three cars if I had second class, two if I had first. That was because of the difference in the weight between the first and second class. I don't see how they could get any more in the cars that were brought to me. They were using the big cars there, the Alliance cars. I never saw any small cars on the Alliance side. I never took any waste from the Alliance side up the Kneal drift and dumped it down to the 700. I have never done any skinning through to the 500 after the bins were put in there. About three trains of ore a day would come out to me. On my shift I would get about three trains of ore. Maybe the night shift skinner would leave some there for me to pull up. They were working just one shift up that drift. The night shift skinner would have so much rock to pull out, that maybe he would leave some

there for me. The night skinner would take it up the Kneal drift and into the 700. The opposite shift was taking the ore up there on trains when they pulled them out. The trains of waste went out the portal of the tunnel that came out of the Elephant stope. None of it to my knowledge ever went up the Kneal drift.

Cross-examination

I went to work there in 1907. Couldn't tell what time of the year it was. The skimmers that brought the ore out from the Elephant stope would take it out through the Alliance tunnel to the Kneal drift, and there I would take it. I would tram it out to the chute and send it down to the 700. I said that when the cars would be received by me after that long journey they could not hold any more ore.

CHARLES ELY, sworn for the plaintiff and examined by Mr. Ray, testified as follows:

My name is Charles Ely. I reside in Park City. My occupation has been motorman.
403 I am familiar with the Alliance side of the defendant's property. I started to work that side about 1907. I remember that series of stopes going out from the McKay cross-cut, and later referred to as the Elephant stope. When I began work on the Alliance side they were just starting in there. They had not yet begun to stope, but they were drifting into the ore. I was mucking. The ores taken out of the drifts approaching the Elephant stopes were disposed of in drifts. I don't remember the name of them. I never heard any names.

There were two of those drifts in front of the stopes and one bin up what they called the Wet drift. I would estimate the distance from this Wet drift to the entrance of the Elephant stope at about 2,000 feet. The ore that was stored in these drifts was screened and hauled over to the King side. We pulled it out and dumped it down to the chute on the 700.

Q. Do you know of any ore being stored in place other than these drifts, the Wet drift and the two drifts near the stope?

A. Yes, sir. There has been ore stored up by that chute where we dumped to the 700; that would be at the top of what is marked on Exhibit 24 here, the Ossian raise where you put it down in the chutes to the 700.

Q. What was finally done with that ore?

A. That was put down the 700 chute and taken from there over to the King shaft.

I was a skinner on the Alliance side.

Q. At what period of the development of this stope, just what time?

A. Well, I was there in 1907, and I also skinned there during the panic of 1908.

Q. Did you ever dump any ore down to the 500?

A. Yes, sir. I could not say how long they had been dumping ore down the Ossian raise or down to the chutes in the 700 when I went there.

Q. How long had they been dumping ore into the bins on the 500 when you commenced to skinning into there and dump it?

A. They had not been dumping very much in there when I got started in skinning there; they were driving that drift through the panic. I was the first man to dump ore in there into the bins on the 500.

Q. What was done with the waste which you skinned out of the McKay cross-cut?

A. That was taken out of the portal of the tunnel and put over the dump.

404 Q. State whether or not at any time while you were moving the waste from the Elephant stope to the King shaft, and the waste to the mouth of the tunnel, you ever took any waste to the 500 or to the 700?

A. No, sir. * * * I moved first and second class ore. We used all Alliance cars.

Q. How late were you skinning on the Alliance side?

A. I quit there sometime in 1908. I don't just remember the date.

I had gone there at the time they were entering the Elephant stope; and before stoping commenced; they were drifting when I went in there; and during that period I never saw a small King car on the Alliance side, nothing except the Alliance cars during that time.

During the panic, beginning 1908, there were five or six men working in the stopes; besides, there was a lot of developing work going on. There were two shifts working. I took the ore from the stopes down the drift and back up the Kneal drift to what is marked here the Ossian raise, and dumped it down the chutes to the 700. I would take from the McKay cross-cut, down to the Kneal drift in a train, all the way from ten to fourteen Alliance cars, to that switch.

Q. Then state what size train you took through the Kneal drift up to the chutes.

A. When we were pulling second class we could pull three up there. The most we could pull of first class was two. The cars were full. We could not take more than two cars of first class up the Kneal drift on account of the grade and the curves, and the ore was pretty heavy. We would split our train there. The ore from the Elephant stope was black ore and heavy.

I have seen before the piece of ore to which you now call my attention as Exhibit 109. The first class ore going up was the same as this ore; the second class was lighter—colored ore. Oh, yes, you could distinguish between the first and second class. The first class was comparable with this piece of ore.

Barney Duffy was loading in there awhile.

Q. To whom did you deliver the ore at the Kneal cross-cut, to Eddy?

A. Why, at one time when I was there, the first time, we had to pull it up and dump it ourselves down this raise; afterwards they put a man there to pull them up from the chutes while we pulled out from the stopes.

405 Q. How many shifts were they working there?

A. They did start three shifts when we were drifting in there. It got so gassy and the air was so bad they had to quit it. Then they worked two shifts.

Q. How many shifts of skinners?

A. Three; we were supposed to make three trips, from three to four, which we did on an average. While I was skinning there I never took any ore out from the Alliance side to the portal of the Alliance tunnel, nor to my knowledge was any taken out by any other shift.

I would come and go to my work through the portal of that tunnel, and I never saw any ore taken out there when I was going or coming. I would be in a position to know, and I don't know of any ore coming out of there.

Cross-examination of Mr. Ely:

I never saw any ore on the dump there either.

I went to work first on the Alliance side for the Company, as nearly as I can remember, in 1907, but I cannot tell just when. I worked there as a mucker, probably two or three months, maybe not that long; they always had me skinning. I got three dollars a day, both as mucker and skinner. I started skinning on the Alliance side in 1907.

Q. How do you know, Mr. Ely?

A. I know I was skinning there during the panic; that was during 1908. I continued skinning, I think, until I quit sometime in the middle of the winter of 1907-1908. I fixed the time because it was too stormy; I got tired; the snow was too deep for me to box, and I quit.

I went back to work skinning on the Alliance side again sometime in 1909. I don't know how long I continued. I have no memory about that whatever. I remember the time I quit as skinner on the first occasion, because it was when the panic was on; that is, I was working when the panic was on. The panic was not still on when I quit skinning in the winter of 1908. I can't give you any idea when I went to work the second time as skinner nor when I quit, nor how long I worked then; but I did work the second time as skinner on the Alliance side in 1909. Before I went to work over on the Alliance side on that last occasion, I think I was working for the Daly-West or Daly-Judge. I am not positive which mine. I was working in either one of those places; I don't just remember which one. I don't remember when I quit, if it was the Daly-West. If it was

406 the Daly-Judge, I don't know when I quit. It was in 1909, but I don't remember whether it was the early part of the year or the latter part of the year. I don't know how long I stayed there; couldn't tell you whether it was many months or whether it was only one month.

Q. Or it might have been twelve months?

A. I couldn't say.

Q. And yet you can remember the other matters that you have testified to in direct examination without difficulty, and looking back to the year 1907, nearly ten years ago, you can remember that the ore that you were mucking and the ore that you were skinning out was about the same as that?

A. Yes, sir I do.

I don't know how much per cent lead that piece would carry; I have no idea. I claim to be a miner now, but I don't know so much about the ore or the value of it. I have no idea of the percentage of lead it would carry. Couldn't say whether it would carry sixty or fifty, or thirty or twenty, or ten. I haven't the least idea. Ore carrying not more than half the percentage of lead that this sample does (109) might have the same appearance.

When I was skinning on the Alliance side I was taking out a great deal of waste. There was very much more waste than there was ore at one time.

Q. How long a time?

A. That was during the first part of the panic.

When we began sending the cars out to the ore bin at the King shaft on the 500 level they were filled when we started.

Q. How much would they settle down?

A. I never measured; never took any notice of them. I just pulled them over there and go back.

Q. Some cars would settle down more than others owing to the character of the ore or how large or how small it was?

A. Yes, sir. * * * Some would settle more than others on the trip out, Oh, yes. They would all be bound to settle some, of course.

Redirect examination.

By Mr. Ray:

Q. Mr. Ely, you remember where you got the waste from, do you, at the period when you said you were removing considerable waste, from that part of the mine?

A. I believe right in the Toony drift, and what they called the Wet drift during this time, we were cleaning up around the stopes, wasn't breaking much ore at that time.

407 When I first started in there they had not yet started to stope from the main Elephant stope.

Q. Assuming the panic, the lay-off from the panic began January 1, 1908, and continued for a considerable time thereafter, I will ask you whether or not you worked on into the following winter, which would be 1908, and 1909, whether it was the winter following the lay-off from the panic?

A. In 1908, I was off for a while, I guess; went back again in 1909.

Q. What I want to make definite is the date you were there. You say you left in the winter?

A. Yes, sir.

Q. Was it the winter following the lay-off from the panic?

A. Yes, sir.

HARRY D. TAYLOR, sworn for the plaintiff, testified as follows:

I am forty-one years of age and reside in Los Angeles, California. I am a mining engineer by profession and a graduate of the Colorado State School of Mines, and I have also attended Cornell and Overland College. I graduated in and have been practicing my profession since 1900, in Oregon, Idaho, Montana, Nevada, British Columbia and Mexico.

I visited the Conklings property about the 10th or 11th of March. My first visit was with Mr. Frank Anderson. I visited the property just to become acquainted with the ground in the west end of the Conklings claim, and I visited it to the extent of going into such openings as were accessible. In a general way much of it is inaccessible through caving. Such stopes as are accessible have been worked out, and it would not be possible now to find out the kind of ore that was taken out there by inspection.

I procured exhibit 109 from a point in the engine drift. I cannot say just where, but close up to a cave in the engine drift, and as far from the Columbia raise as you could get at that time. I should judge I took it about the center of this 135 foot strip east of 2612-F, as I remember it now. It is east as I remember it now and can judge from this map, east of that station. This is merely a specimen of the larger pieces I got. It is a specimen piece; there is no chance to sample it.

I have heard the testimony as given by Mr. Brooks as to the experiments he made with the specimens, five in number, which he took from the places designated by him, that are open in these stopes. I heard him describe his method of ascertaining the volume of the ore in place as determined by what we may call the Wheat method.

Q. What have you to say, Mr. Taylor, as to the accuracy of a method of that kind?

A. I don't think it is accurate. * * * You start with a known error. The wheat cannot be so compacted that you can exclude all the air, showing that there are ore openings in such a mass of wheat. For that reason the wheat cannot be so packed around the specimens that the air between the wheat and the specimen can be excluded. Therefore, the volume of the specimen is increased by the volume of

the air is not excluded from that contact; and then the wheat is more or less springy and more or less subject to taking up moisture, increasing in size; and Mr. Brooks' particular way to me would be unsatisfactory, because I believe even with the use of wheat a man could carry on the experiment more accurately than was carried on by Mr. Brooks as he described it.

Q. What have you to say in the first place, Mr. Taylor, as to whether in your judgment, the ore, first class and second class which has been described as having been taken from these excavations, occupied in place and by dry weight a less volume per ton than the figures given by Mr. Brooks?

A. I believe they occupied a less volume.

I think, figuring theoretically on the ore as shown, that is, the specimens exhibited here would give a more accurate cubical content for that ore than did the method Mr. Brooks pursued.

Q. What would that theoretical method be?

A. Figuring from the analysis of the ore the cubical contents occupied by the constituents of that ore, the lead and the iron, or lead sulphide and iron sulphide and zinc sulphide, with the gang lime.

Q. You are referring now to the constituents as given by Mr. Brooks in connection with these various specimens which he showed here?

A. The assay value of those specimens, the analysis.

Q. Proceed and state how that theoretical consideration of the matter is carried out?

A. Taking lead sulphide and using 4.33 cubic feet to the ton, that is, pure lead sulphide, and using for iron sulphide 6.4 cubic feet to the ton, and for zinc sulphide, 7.8 cubic feet to the ton, and computing from the analysis these different amounts together with the lime, gives a much less content than Mr. Brooks figured with 409 the wheat. The volume of the lead, iron and zinc sulphides that I have given are theoretical and gotten through the use of the specific gravity. * * *

If we assume that Mr. Brooks' specimens here represent the ore which was taken out from the cavities, the result of these theoretical calculations which give us for the first class ore a figure approaching 7 cubic feet to the ton, and perhaps 8.3 or 8.4 cubic feet per ton for second class.

Q. Those figures are merely on the assumption that might be made that those did represent the ore?

A. Yes, that those samples represent the ore and that they are compact samples, which they seem to be.

In giving the figures which I have I assume the gang—the part of the specimens not mineral—to be lime rock, and that 12 cubic feet of lime rock equals a ton. I did not assume that the gold or silver contents would have any appreciable relation to the volume of the ore.

I was present when Mr. Brooks gave the volume of the excavations

le the Conkling at 55,250 cubic feet, and the volume of the excavations outside the Conkling as shown upon these maps at 128,273 cubic feet, giving a total in the 600 stopes of 183,523 cubic feet in all. It is called the 600 stopes. It was one of the party which went through the shift bosses' books to get the data which is embraced in exhibit 48, which is in evidence here.

Q. In connection with the testimony of Mr. Brooks, it was determined upon certain assumptions that if the amount or the volume of first class ore was taken at nine cubic feet per ton, and 11.17 cubic feet per ton for second class, the total volume of ore would be too great to be extracted from the cavity in the mine, the cavity which contained the added ore in the mine?

A. The 600 cavity.

Q. The 600 cavity?

A. Yes, sir.

Q. But that was upon an assumption of one and $\frac{1}{8}$ tons of second class ore to the car, and upon the assumption of $1\frac{1}{2}$ tons of first class ore to the car?

A. Yes, sir.

Q. That involved that assumption and it also involved what other assumption as to waste?

A. That computation involved the assumption of one-fifth waste.

Q. Now, have you gone through these figures and the figures given by Mr. Brooks and Mr. Humes so that you can arrive at the cubical contents of a ton of first class and a ton of second class ore as it was actually taken from the stopes, and without any assumptions whatever?

A. Yes, sir, without any whatever.

I will state in the first place that I arrived at that from the figures in the testimony as to the 600 stopes.

The years involved in the exhibit No. 48 are 1914, 1915, and 1916; part of 1913.

Q. Which years do you take as having data from which you can compute?

A. 1914, 1915 and 1916.

Q. Your computation, of course, refers to first and second class ore?

A. Yes, sir.

Q. Which year do you take for the computation first?

A. I take the year 1915. * * * I find as the amount of first class ore taken out in that year, 1,536.76 tons. That is the final result of reducing to tons. The second class equals 15,579.57 tons.

These figures are deducible from the testimony already given.

Mr. Humes states that 30,148 tons of first class and 29,894 tons of second class were taken from the stopes of the Silver King and the Alliance ground, excepting that noted by exhibit 48.

Q. How do you arrive at the amount of first class taken that year from the 600 stopes?

A. By 1915 cost analysis sheet, which is in that book on top of the large one. It is a record introduced by the defendant marked "Silver King Coalition Mines Company, Cost Analysis Sheet, yearly summary, 1915."

(Introduced in evidence as exhibit 116.)

By this exhibit we see that the total production of the mine for that year is 77,424 tons of ore extracted from the entire mine. According to that record there were 45,734 tons of mill ore or second class ore, leaving 31,690 tons of first class ore shipped.

Q. How do you determine how much of that came out of the 600 stopes?

A. Mr. Humes named 30,148 tons of first class as coming from all stopes exclusive of those nominated in exhibit 48. That would leave 1,542 tons of first class to be accounted for by exhibit No. 48.
* * *

411 To arrive at the second class ore that is nominated by exhibit No. 48, I subtract 29,894 tons, the tonnage given by Mr. Humes on Page 1293, as second class ore from the King ground, exclusive of that shown in Exhibit No. 48. So I put down 45,734 tons minus 29,894 tons, and have a remainder of 15,840 tons, which is the number of tons of second class to be accounted for by exhibit No. 48.

Now to find the proportion, or the amounts of first class and second class as there determined that came from the 600 stopes, we must eliminate the tonnage that came from other stopes as nominated in that exhibit No. 48, and we find there were five cars of first class and 342 cars of second class from other than the 600 stopes by exhibit No. 48. * * * The weight given by Mr. Humes for a first class car of ore is 2,098 pounds, and 1,523 pounds in a car of second class. Multiplying five by 2,098 we get 10,490 pounds of first class or 5.24 tons.

Multiplying 342, the number of cars of second class, by 1,523, we get 520,866 pounds, or 260.43 tons of second class. That is from ground outside the 600 stopes.

Then subtracting this tonnage of first and second class from the tonnage arrived at above, namely, 5.24, from 1,542, and we have 1,536.76 tons of first class from the 600 stopes, and subtracting from 15,840 second class tonnage, the 260.43 tons outside the 600 stopes, leaves 15,579.57 tons of second class. We have then for 1915, 1,536.76 tons of first class and 15,579.57 tons of second class from the 600 stopes in 1915. These figures involve no assumption as to whether the cars were full or half full.

Mr. Humes in his figures for 1915, gave tonnage as he explained; and in his figures for 1914, gave cars; therefore, of course, for 1914, we are running it out according to cars, and in 1914, by Mr. Humes, he gave 17,048 cars of first class and 88,249 cars of second class, exclusive of the ore that is accounted for by exhibit 48.

We have 910 cars of first class and 6,279 cars of second class by exhibit 48. By adding those figures we get total cars as follows: 17,958 of first class and 94,524 cars of second class.

By summary for 1914, cost analysis sheet, which is exhibit 117, we have 59,907 tons of mill ore from the whole mine, which is second class. This includes the whole mine, this analysis. 59,907 412 tons multiplied by 2,000 gives 119,814,000 pounds, divided by 94,528, the number of cars of second class, we get 1,268 pounds to the car of second class. That is for the whole mine. Under the head "ore extraction" in this cost analysis sheet we have 77,429 tons of ore extracted. That includes both first and second class. Deducting 59,907 tons of second class leaves 18,532 tons of first class shipped in the year 1914. 18,532 multiplied by 2,000 and divided by the cartage of first class, gives 2,063 pounds to the car of first class.

By exhibit 48 we have 233 cars of first class from the 600 stopes. 233 multiplied by 2,063 divided by 2,000, gives 240.34 tons. We have from the same exhibit 48, 3,160 cars second class from the 600 stopes, or 3,160 multiplied by 1,268, the weight of the car, divided by 2,000, gives 2,003.4 tons second class from the 600 stopes in 1914.

Going now to 1916, we take Mr. Humes' car weights for 1916, at 1,418 pounds to the car. By exhibit No. 48 we have 2,335 cars of second class from the 600 stopes, and no first class. This last figure multiplied by 1,418, divided by 2,000, gives us 1,655- $\frac{1}{2}$ tons second class for 1916.

The summary, therefore, is as follows:

1914:	240.34 tons of first class,
	2,003.44 tons of second class.
1915:	1,536.76 tons of first class,
	15,579.57 tons of second class.
1916:	No first class.
	1,655.50 tons of second class.

Making the total production for those three years from the 600 stopes, 1,777.10 tons of first class, and 19,238.51 tons of second class.

If we assume as the volume for the first class, nine cubic feet to the ton, the first class would represent 15,994 cubic feet, and 11 cubic feet to the ton for second class, which would equal 211,624 cubic feet, or a total ore excavation of 227,618 cubic feet. The excavation as already given by Mr. Brooks—total cavity from the 600 stopes equals 183,523 cubic feet. If we take off one-seventh for waste it would leave the total ore cavity 157,305 cubic feet; in which, of course, it would be manifestly impossible to introduce 227,618 cubic feet.

I take one-seventh of the material as representing waste from an average of the figures given by Mr. O'Neill.

413 Q. Have you estimated to your entire satisfaction the number of cubic feet which would be reasonably represented by the first and second class ore per ton severally?

A. Yes, sir.

Q. What have you taken for the first class?

A. Six cubic feet for the first; 7.62 cubic feet for the second. Taking those determinations and applying them to the number of tons which I have found came out of the 600 stopes, the total cavity would be 157,259 cubic feet; that is the cavity to be accounted for; 7.62 and six are the figures that nearly fill it. In other words, it gives us 157,259 cubic feet to go into 157,305 cubic feet, a difference of about 45 cubic feet.

Cross-examination of Mr. Taylor:

My observation was directed to that part of the Columbia raise up to where it starts on its steep pitch. That would be about sixty to seventy-five feet, I should judge. I calculated the cubic feet that would be required to make a ton of the ore which Brooks had testified to by taking the specific gravity of pure sulphide of lead, and the specific gravity of iron sulphide of pyrite, and the specific gravity of the gangue and zinc sulphide. The analysis gives the amount of zinc, iron and lead, and the combination with sulphur gives a certain weight to a ton, and the difference I allowed for gangue. There was an allowance, it was a direct result. Assuming those four constituents for the ore by figuring the lead [sulphide], iron sulphide and zinc sulphide in pounds to the ton, subtracting that quantity from a ton weight, 2,000 pounds, I arrived at the amount of lime present. I have the determination of one of Mr. Brook's samples here. I didn't pay much attention to his determination. I think this was No. 1; .05 gold, 17.5 silver, 36.2 lead, 21.6 zinc, no copper, 10.8 iron. I made a calculation of only one of the samples of Mr. Brooks. That was sample No. 1. Calculated theoretically, if we had a ton of that kind of material with that composition, 1.67 cubic feet would be occupied by the lead sulphide. I convert the 36.2 into lead sulphide. The lead sulphide in a ton of that kind of ore would have a volume of 1.67 cubic feet, and that is all the lead sulphide one could get out of that percentage of lead. The zinc would be 2.58, and the iron 1.39 cubic feet. The balance of the seven cubic feet would be made up of limestone gangue, but I did not arrive at the volume in this manner. I took the lead and combined it with sulphur and found that there was 836 pounds of lead sulphide present in 414 that ton. I took the zinc and combined it with sulphur, and found 644.76 pounds to the ton of zinc sulphide. And I found 462.52 pounds of iron sulphide in the ton. I added those, and took that from 2,000, and got the lime or gangue, which was approximately 66.71 pounds. This is theoretical purely. I do not state that I considered it accurate. I considered it a method of approximating or arriving at a conclusion relative to this ore. I do not consider it an accurate method because the physical characteristics of the ore are unknown. This method of arriving at the cubic feet required to make a ton might lead one far astray. That method as applied to every place would be wholly unreliable. That method as applied to this particular ore as represented by these samples might not be far wrong, because of the fact that this ore appears to me to be a compact ore as represented by these samples. It might not be

very far wrong, and it might be very far wrong. I would hate to arrive at the tonnage of ore in a mine in this way. This would apply to first class and second class ore. In my computation of seven cubic feet per ton for first class, and 8.3 or 8.4 for second class, I wouldn't say that I made that allowance for moisture. When I made that statement relative to seven and 8.4, the question was asked me toward what points this way of figuring lead me, and I said about seven, and about 8.4. If we were getting it right down to the correct figures, even on this way of figuring, a man would have to handle the moisture. The one that I just figured for you did not give seven cubic feet as the first class. Making the allowance of 66.72 pounds of limestone, that sample would give 5.6 or 5.7 instead of seven. What I meant by saying about seven feet in my direct testimony was that taking the samples it might be around seven feet. You (Dickson) then asked me for a specific sample, and I gave it to you there. It is below seven, but the next one might go above seven.

The generally accepted method in our profession in determining the *generally accepted method in our profession in determining the* specific gravity of ore, and thereby ascertaining the number of cubic feet required to make a ton is the liquid method. If I were called upon to do it I would take the sample and weigh it in air. I would get its volume by measuring a certain amount of water into a graduated receptacle and drop the sample into that receptacle, and immediately read the increased volume. That eliminates, to my way of figuring, the time necessary to weigh a sample in water, which is more than required to read the volume of the sample after
415 you have dropped it in water, which is almost instantaneous, thereby eliminating absorption, and such things as that that come in in different ores. I would then compute it. I would have the volume of that particular sample, and I would have the weight of that particular sample. I have not personally used the usual method. The usual method, I think, is to arrive at the specific gravity by weighing it in water. After it has been weighed in air and in water you arrive at the specific gravity of the material, and in this comparison with water you arrive at the cubical contents. I have not carried on such tests. Through the learning of our profession I know that that is the generally accepted method. Then, in order to ascertain with any degree of accuracy the number of cubic feet required to make a ton, you would have to know the porosity, if any, there was in the rock, and its moisture, and what moisture might be absorbed while it is in the water. I did not do that. I did not use that method rather than the method by which I arrived at the figures 6.7 for first class and 8.3 for second because I had the actual figures, which to my mind eliminated any reason for arriving at any other conclusion. I mean the actual figures as given here by me. If we were to take to the figures of seven cubic feet to the ton for first class, and eight and one-half per ton for second class, the tonnage for the years 1914, 1915 and 1916 would amount in the aggregate to 175,967.03 cubic feet, if I have made no mistake.

I did not make the gravity test because of what I believed to be the certainty of the figures which I have given here. My theoretical

test I figured over before I came into court. I figured theoretically before this solution of the problem had dawned on me, which was after these figures had come in a week or more ago.

I did not make a proper test to determine the volume of Brooks' samples, because when I have the cubical contents of ore as a whole, and can measure the hole, and can weigh the ore, I absolutely know the capacity of that hole, and the weight of the ore, and the idea of testing it where there is a chance of mistakes in every way does not compare in my estimation with the actual facts as I see them here. I was asked for the theoretical method because that theoretical computation was arrived at before these figures were arrived at here, and these figures as they stand were never arrived at until after Mr. Humes gave his testimony, which is since those figures over there were placed on the board. They were assumptions in the first instance a week ago, and in this instance I consider there are none. I said that my result [arrived] at by computation was theoretical. Any man that knows ores knows that a theoretical is an approximation.

I do not think the Brooks wheat method for this particular ore would give a pretty close approximation to the truth above some other method. I do not think the grains of wheat could be so adjusted as to make that practically accurate.

I made a computation of the number of tons that had been taken out, and found that by taking six cubic feet for a ton of first class, and 7.62 cubic feet for a ton of second class, the cavity from which it was taken must have been 157,259 cubic feet. I took six cubic feet for the first class ore because by making figures for the first and second class ore I arrived at six as the most just figure to put in here. If you use 6.5 in that computation the second class would drop below 7.62. If you had a ratio of nine to eleven in the accounting, this ratio of six to 7.62 [a-most] carries out that relationship. The six cubic feet is an assumption within limits. I wouldn't put three or two cubic feet, or 4.33, or five. I wouldn't put ten. I knew, or believed I knew, the number of tons of first class, and knew the number of tons of second class ore that came out, and knew the dimensions of the cavity before I adopted the figure six for first class, and 7.62 cubic feet for second class. I considered what those figures would lead me to. Of course I figured it, and I surely figured it more than once. I certainly used different figures than those used here. When I got 7.62 and six and found that agreed within 100 cubic feet, or such a matter, I adopted those figures. You make one adoption and the other one follows. If I had taken seven my second class would have been just a little over seven; both of them the same cubic feet, which would have been ridiculous in this case.

Redirect:

If we assume the first class ore in this stope at seven cubic feet, it would necessitate that the volume of the second class ore in this particular stope would be 7.5 cubic feet for second class.

Mr. Dickson: That, of course, would be ridiculous, wouldn't it?

Witness: Yes, absolutely. Therefore, you drop your figure on
your first class, because you cannot run it any higher. That
417 is what you have got here to work out. There is only one
problem in this whole business to work out, and that is to
find this quantity of ore which is absolute, and the cavity which is
absolute, and allow a difference between the first and second class
ore.

Recross:

I did not assume anything as to the weight of a car of second class
ore. I took the car weight as given by Mr. Humes for this ore from
the entire mine. I assumed in this computation that a car of second-
class ore that came out of the 600 stopes would weigh the same as the
average weight of all the cars that came out in the entire mine during
the year 1915, which is to the disadvantage of this stope, because
this is a sulphide ore. As I understand it, the carbonate ore came
from the balance of the mine. If any carbonate ore is measured in
the computation of these cars it gives the disadvantage to this stope
because I know there is no carbonate ore coming from this stope.
There was only one place in the computation where we took Mr.
Humes' car for the computation, and that was in 1916, where he
gives nothing in the testimony relative to the ore that came from the
entire mine. In 1914 he gave carloads in his testimony here, and I
connected up the cars from Exhibit 48 to that testimony. In this
summary the entire production states in tons exactly how much came
out of the mine in 1914. That states in cars how much came out of
the mine in 1914, and, therefore, by dividing the tonnage given us
as absolute by the cars given, which is absolute, according to the
testimony, you get a figure for carloads, of pounds per carload,
which is exactly what it is. In this calculation I took or assumed
that a carload of second-class ore from the 600 stopes would be just
the same as the average weight of all the cars of second-class ore
that came from the entire mine. I took the carloads as given. So
also with the first-class ore in the 1916 computation. In 1915 there
is absolutely no carloads used in the computation. That is given in
tons in every case. The production in 1915 was larger than 1916.
According to the figures it is the major portion of the ore. I got
the number of tons that came out of the 600 stopes in 1915 from Mr.
Humes. He gave the tonnage in his figures for 1915. He did not
use it in cars. In getting the number of tons that came out of the
Elephant stope, I had to take the number of cars as shown by the
shift bosses' books, and in doing so I assumed or took for granted
that a carload of second-class ore from the 600 would weigh
418 just the same as the average weight of all the cars of second-
class ore that came from the entire mine. I did so with the
first-class ore, and consider it fair.

(Contract between Eureka Development Company, Ltd., and
American Smelting & Refining Company, dated June 1, 1906, offered
in evidence as Exhibit —.)

Mr. Critchlow: It is agreed between counsel that the piece of ore which is Exhibit 109 assays 71.7 per cent lead by fire assay, and 72.2 per cent lead by wet assay.

Recross:

Thursday, June 14, 1917.

I allow the twelve cubic feet for limestone in the theoretical determination. I never have had occasion to determine the specific gravity of limestone. I used the specific gravity as used in some text book. I have forgotten which one it was, and took the average as given by standard authority, I have forgotten which one. If it took twelve cubic feet to make a ton of limestone, and we had ore in limestone carrying not to exceed five per cent lead, two per cent zinc, ten per cent iron, and no copper, the balance being limestone gangue, I do not think it would take more than ten cubic feet to make a ton of that kind of ore. It might take some more than nine, and it might run eight. I do not think it could possibly run twelve, hardly think it could run as high as eleven. I don't think I would want to state it would run more than ten. I could figure it out theoretically. (After making computation.) In such ore, counting the metals in a sulphide state, the ore theoretically would amount to 10.13 cubic feet. If the ore of that class were substantially more porous than the limestone it might make it even more. In this computation which I was making of the number of cars and tons that came from the 600 stopes in 1914, 1915 and 1916, I included all of the ore that came during those years from the 600 stopes without, as well as within, the Conkling ground.

Redirect:

If one should use a calculation of 10.13 for a second-class ore on the exact figures that we had yesterday for the number of tons and the volume of the cavity, there would be no first-class ore. There would be too much second-class ore to fill the hole. This is demonstrated by multiplying the second-class tons by 10.13. We would have 194,886.10 cubic feet of second-class ore from the tonnage represented here to go into 157,259 cubic feet, which is impossible. It would be more than enough to fill the cavity without allowing any waste. It wouldn't allow any first-class, and wouldn't allow any waste.

Recross:

Mr. Dickson: Will you be good enough, Mr. Taylor, to take samples on to five of Brooks, and in company with Mr. Harry Ellis, make a specific gravity test for us. You can both sign it and hand it in to the court.

A. Yes, sir.

Mr. Critchlow: We are glad to ask Mr. Taylor to do that, but it seems to us immaterial because it is not claimed here that that is a sample of the ore that was in the stope.

Mr. Dickson: It came out of it.

Mr. Critchlow: I know I can get lime rock out of it. It seems to be immaterial. It would seem to take a lot of time which would get us nowhere, but that is only objection I make. I could go up there and get samples like 109 possibly, in the Engine drift, but it doesn't get us anywhere, as I think.

Mr. Dickson: I don't suppose it would take but a few hours to make the test.

Witness: It will take some time.

Mr. Dickson: One purpose, I have in mind in desiring this is to show how inaccurate, if at all, Mr. Brooks' wheat method was.

Mr. Critchlow: I think, then, we better take them all. It might be he happened to strike it right, that case.

Mr. Dickson: Take them all.

Mr. Critchlow: In that case I want them to take 109. We don't make any objection excepting on the score of time. It may take a lot more time if we go into these intricate things that don't mean anything, when we have gotten actual results here.

Witness: A report does not involve my approval of these samples as representative, does it?

Mr. Critchlow: It has nothing to do with that.

Mr. Dickson: Oh, no.

420 The Court: You can make that test if you desire it if you make it in the form of a report so it may be submitted without reopening the case or calling witnesses after you close today.

Transcript of Taylor's Figures on Blackboard. 1014.

1900.

17,048 cars first class from mine, exclusive of Ex. 48 (Humes p. 1292).

88,240 cars second class from mine, exclusive of Ex. 48.

940 cars first class by Ex. 48.

6,279 cars second class by Ex. 48.

Total first class 17,958 cars.

Total second class.... 94,528 cars.

By summary 50,907 tons second from whole mine.

119,814,000—94,528=1,208 per car of second class.

Total ore extracted 77,430 tons.

89,907 tons.

18,532 tons first class shipped.

18,532 x 2,000

—=2,063 per car first class.

17,958

By Ex. 48, 233 cars first class.

233 x 2,063=480,679 240.34 tons.

By Ex. 48, 3,160 cars second

3,160 x 1,208=4,006,880

2,068.44 tons.

	Total for 1915..	77,424 tons from whole mine
		45,734 milil or second class
1884.		
		31,690 first-class ore shipped
		30,148 Humes, p. 1293
		1,542 to be accounted for by Ex. 48.
		45,734
		29,894
		15,840 tons second class to be accounted for by Ex. 48
	1,542—524=	1,536.76 tons first from 600 stope.
	15,840—260.43=	15,579.57 ton second.
	5 cars first	{ from ground other than 600 stopes by Ex. 48.
	342 cars second	
	2,008 per car first class	
	5	
	10,490=	5.24 tons.
		1,523 per car second
		342
		520,866=260.43 tons.
1885.		1916.
	Humes car wt. for 2nd cl. (p. 1424, Ex. 91)=	1418
	By Ex. 48, 2,335 car 2nd cl.	
421		
	2,335 x 1,418=	3,311,030 or 1,655.5 tons 2d' cl. for 1916.
1886.		

Summary.

1914.	240.34 1st.....	2,003.44 tons 2nd cl. from 600 stope.
1915.	1,536.76 1st.....	15,579.51 tons 2nd cl. from 600 stope.
1916.	None 1st	1,655.50 tons 2nd cl. from 600 stope.
	1,777.10 1st.....	19,238.51 tons 2nd cl. from 600 stope.
	1,777.10	
	9	
	15,944	c. f. 1st cl.
1887.		
	19,238.51	
	11	
	241,624	c. f. 2nd cl.
	15,594	
	211,624	
	227,618	c. f. Accord'g to estimate as to volume in acc't.

1888.

1/7 Waste

O'Neill, p. 1261.

7) 183,523 c. f. excavation 6000 stapes. Brooks, p. 1391.

26,218 waste

157,305 ore.

By taking 6 c. f. for 1st cl.

By taking 7.62 or 2nd cl.

upon quantities named

6 x 1,777.10

7.62 x 19,238.51 } = 157,259

F. J. HANSON (recalled).

Cross-examination:

I begun as an assayer October 1, 1914, and presented here my books of record showing the entries as to the sample number and my determinations. They were made the day after they were taken, I think, in every instance. I got the sample number and the name of the person who brought it in at the same time. It is a matter of fact that in the last six weeks I have made up a part of these books, as a matter of convenience, for the purpose of sending them down here as evidence in this case, to find where the different lots belonged. I have gone to the mill man and gotten those lots and put them in within the last four or six weeks. In some instances it was three years, or nearly three years after the date of the analysis. I

422 had made the determinations and given them to the mill man before. I took them off those mill reports out of that book there and copied them into my books. I don't remember exactly when I did that, but it was lately, about the last month, I think. This book here is one of my books. In order to get my information I went to the mill report book. It was Silver King Coalition Mines Company monthly mill report. I would take a lot, say Mill Lot No. 33, carbonate ore, and check the head assays and tails for convenience of finding that in my own book. I was told to do that for convenience, so we could find it quick in this book. When I had gotten the head and tail assay that corresponded I put it under the date and number there in my book. Taking, say, "Mill Lot No. 90, December 1914, sulphides, average heads and tails." I wrote "Average Heads and Tails Lot No. 90," in that book within the last month. I got the assays, heads and tails, silver and lead and gold from this page (indicating) to put in there.

I entered them right there within a month. All of the history which my assay book shows as to Lot No. 90 are entries which I made within the last month or six weeks. They are assays that I had given to the mill man, but I can't remember any particular case. I remember that I gave him some assays of every lot that ever went over there. As to whether or not he entered them correctly I have no

independent memory, and these entries were not made at the time. They were not made upon any specific memory of my own as to the facts which I entered. I had orders to transcribe into my book under date of December 13, 1914, this entry which was not made until 1917. My orders were for Mr. Humes.

Redirect:

(Exhibits 119, 120, 121 and 122 marked [ny] reporter.)

Witness: I couldn't take my own assays books for the dates given in the above exhibits and ascertain therefrom without reference to the mill sheets what the average heads and tails would be that went into that lot. There are different hours, possibly sixteen hours, or twelve hours, in different days, and that would change the value just a little, a few tenths.* In making up a composite sample that represents Lot 90, I would take the heads and tails and weigh them out every day according to the number of hours the mill ran. I would weigh out that composite sample when the lot was completed, and take a proportion for each day. When I assayed it I
423 would give Mr. Devlin a certificate of it. As near as I know that was a truthful certificate of the result according to my assays.

(Witness then figures out a sample from the book.)

Mr. Humes asked me if I had been carrying the composite samples all the time I had been there. I said no, I had not. He said, "Well, for convenience, so as find these things quick, I believe you had better go back and put those in."

FRANK ANDERSON (recalled by defendant in rebuttal):

Identified certain ore extraction books as having been used by him and Mr. Taylor in checking over the results embodied in Exhibit 48, and the books were offered and received in evidence as Exhibits 123 to 126 inclusive.

H. P. TAYLOR (recalled by defendant in rebuttal):

Identified certain books used by himself and Anderson in checking over the results embodied in Exhibit 48. These books were offered and introduced in evidence as Exhibits 137 to 139, inclusive.

Ore extraction book for April, 1915, numbered and received in evidence as Exhibit 140.

Later the experts made and there was received in evidence the following report:

Report of Ellis and Anderson.

W^a. the undersigned, respectfully report to this Honorable Court the results of the determination of the specific gravity of the six samples of ore delivered to us pursuant to agreement of counsel of re-

spective parties in said cause. Owing to the nature of the samples it was necessary to paint each one with paraffin, this method being commonly known as the paraffin method for the determination of specific gravity.

Each of the samples was first weighed in air, then was painted with melted paraffin, and then weighed with the paraffin coat in air, then weighed again with the paraffin coat in water to determine the displacement of the rock plus the paraffin developing it. The specific gravity of the paraffin was determined and its volume calculated therefrom in each instance, and this volume deducted from that of the particular sample that it enveloped, in order to obtain the true displacement of the ore itself.

The results of this determination are as follows:

Bag sample.	Exhibit No.	Number pieces.	Weight in grams.	Specific gravity.	Cubic feet to the ton.
No. 1	59 Deft.	1	1242.7	4.94	6.5
2	60 Deft.	1	900.2	4.18	7.7
3	61 Deft.	1	1232.5	4.55	7.1
4	62 Deft.	1	505.4	4.13	7.8

(In this sample about $\frac{1}{4}$ of the material was fine and the gravity of the same was not determined.)

5	63 Deft.	2	535	3.12	10.3
.....	109 Pittf.	1	3563.5	6.06	5.2

HENRY R. ELLIS.
FRANK ANDERSON.

Dated at Salt Lake City, Utah, June 16, 1917.

F. J. HANSON, called by the defendant in rebuttal, testified as follows:

Direct examination:

Q. Mr. Hanson, you were interrogated when you were on the witness stand some days ago under cross-examination, respecting a conversation you had with Mr. Percy Parker?

A. Yes, sir.

Q. Certain questions that were asked you there, where you made certain statements were denied. Since that time Mr. Parker made additional statements which I want to interrogate you about now. Did you say to Mr. Parker that these assay books down in Salt Lake for use on the trial, that they were fakes?

A. I certainly did not.

Mr. Critchlow: This is not rebuttal, if your Honor please. We object to it.

(Discussion.)

The Court: I think the question came up when Judge Dickson objected he was not asked about it. Then he withdrew the objection. That is my recollection.

By Mr. Dickson:

Q. Did you in that conversation or at any time say to Mr. Parker that the assays of some of the samples that came from the Receiver's stope, would make a man's eyes stick out?

A. I did not.

425 Q. Did you say to him or in substance anything like this, that the assays shown in these books were fakes?

A. I did not.

Q. I ask you to state the conversation, how it originated and the whole thing and what happened afterwards?

A. Mr. Parker was introduced to me by Will Treweek—

Mr. Critchlow: This has all been gone into, if your Honor please.

Mr. Dickson: It won't take two minutes.

A. During the general conversation he confidentially told me that he had a proposition to make to me.

Q. What do you mean by confidentially, what did he say?

A. In a low tone of voice, so he couldn't be heard very plain, that is, by outsiders, if I would put them on to inside information and fix those books of mine so they would show first class samples from the Receiver's stope, I could name my own price. I said you name it. He said "I will meet you tomorrow night at this place at nine o'clock, then I will be able to talk business with you." I first, a little before that, said "Who are you? What do you represent in this?" He said "I represent Mr. Critchlow." But I didn't go back that night at nine o'clock.

Q. Then what was done?

A. That was all as far as I was concerned.

Q. Did you make any inquiry of him as to how you were to be paid?

A. Oh, yes, I says "What talks, checks or cash?" He said "We do business with cash."

Q. Did you meet him the next day?

A. No, I never seen him since until in the court room.

Q. And you had never met him before?

A. Never met him before.

C. P. BROOKS, called by the defendant in rebuttal, testified as follows:

Direct examination:

Q. Do you know of a temporary ladder-way that there once was, I think in 1908, as I remember the testimony of Mr. Treweek, a temporary ladder-way that went about the Elephant stope as shown in blue there, through some limestone and into a stope above.

A. I know of a raise that went up there; I can't remember the

ladder exactly whether it was temporary or fastened; there was a ladder way up it.

126 Q. What did that raise or ladder-way, whatever you call it, what did it go through, from the top of the Elephant stope, as colored in blue?

A. My recollection is that it followed a streak of ore up there; near the top there was a little stope.

Q. What stope was that?

A. Well, wasn't any name to it.

Q. Has it any name on these maps now?

A. No; I think the raise is shown here.

Q. Where?

A. The one I have reference to is right close to the Wet chute; this raise goes up—it started and went through what is known as the Hat stope, then went up into the country above; afterwards the bottom of it was taken out around this hat stope.

C. J. O'NEILL, called by the defendant in rebuttal, testified as follows:

Direct examination:

Q. Mr. O'Neill, do you know a man who one time worked in the 600 top stope and also later in the 704 stope, named John Whitta?

A. Yes, sir.

Q. Did you ever state to him while he was working in the 704 stope that any first class ore that did not weigh more than ten or fifteen pounds, to throw it in as second class?

A. No, I never told anybody that.

Q. Or anything like that?

A. No, sir.

Q. What were your instructions about sorting ore?

A. To pick it down close.

After the taking of testimony in the case and the submission of said reports of the experts, the defendant filed its brief and embodied therein the account purporting to show the amount due the plaintiff, as disclosed by the evidence taken at the hearing, the same being as follows:

Summary of Defendant's Receipts and Disbursements and Also the Items of Interest with Which it Should Be Credited and Items of Interest with Which it Should Be Charged.

Development Work Done by Silver King Company in Conkling and Arthur Claims Before Extraction of Ore Commenced.

1902.

Cleaned out from station 131 to station 166 plus
13.8, 2079.5 ft., 100 ft. of this or thereabouts cost

427

\$3.50 per ft., the balance \$1.25 per ft., according to Dailey's testimony.....	\$2,824.38
Crescent cross-cut run from station 1155 to station 1156 plus 22, 90.5 ft., cost \$12.00 per ft.....	1,086.00
	<u>\$3,910.38</u>

Interest on \$3,910.38 at 8% from Jan. 1, 1903, to May 1, '07..... \$1

1903.

Crescent drift from station 166 plus 13.8 to station 166 plus 78.8.....	65 ft.	
Crescent drift from station 1173 plus 11.5 to station 1174 plus 11.....	89 ft.	
At \$15.38 per ft.....	154 ft.	\$2,368.52
Crescent drift from station 166 plus 78.8 to station 1176 minus 2.5.....	35 ft.	
Crescent drift from station 166 plus 78.8 to station 577 plus 6.....	974 ft.	
Crosscut south from station 1176.....	29.5 ft.	
Crosscut north from station 1177 A.....	15.5 ft.	
Crosscut north from station 653.....	17.0 ft.	
Total at \$15.38 per ft.....	1,071.0 ft.	16,471.98
		<u>\$18,840.50</u>

Interest on \$18,840.50 at 8% from Jan. 1, '04, to May 1, '07..... \$5.0

1904.

Work done in the Arthur Claim:

Tarbett drift from station 588 plus 7 to station 658 plus 11, total at \$15.38 per ft.	319 ft.	\$4,906.22
Crescent drift from station 577 plus 6 to station 604 plus 25 (work done in Conkling claim)	207 ft.	
Crescent drift from station 605 plus 10 to station 660 (work done in Conkling claim)	200 ft.	
Crescent west from station 601 plus 10..	38 ft.	
Crescent west from station 605.....	23 ft.	
Total at \$26.186 per ft.....	468 ft.	12,255.05

Crescent drift from station 604 plus 25 to station 605 plus 10, total at \$54.073 per ft.....	60 ft.	3,244.38	
Crosscut south from station 601 at \$15.38 per ft.....	56 ft.	861.28	
		<u>\$21,206.93</u>	
428			
Interest at 8% on \$21,206.93 from Jan. 1, '05, to May 1, '07.....			\$3,960.82

1905.

Crescent drift from station 600 to station 604	185 ft.		
Crosscut southwesterly from station 601.	65 ft.		
	<u>250 ft.</u>	\$6,546.25	
Total at cost of \$26.185 per ft....			
McKay's crosscut from station 600 to station 600 plus 130, cost \$12.00 per ft.	130 ft.	1,560.00	
		<u>\$8,106.25</u>	
Interest at 8% on \$8,106.25 from Jan. 1, '06, to May 1, '07.....			864.67

1906.

McKay's crosscut from station 600 plus 130 to station 607 plus 40.5.....	284 ft.		
K-K drift from station 1856 plus 2 to station 1857 plus 2.....	42 ft.		
	<u>326 ft.</u>	3,912.00	
Total at \$12.00 per ft.....			
Interest at 8% on \$3,912.00 from Jan. 1, '07, to May 1, '07.....			104.32
		<u>\$56,036.06</u>	<u>\$11,318.53</u>

1907.

Work done prior to May 1, 1907:

East drift from McKay's crosscut prior to June 1, 1907, from station 1855 plus 2 to face, 140 ft. at \$12.00 per ft.....	1,680.00		
	<u>\$57,716.06</u>	<u>\$11,318.53</u>	
Total expenditure and interest to May 1, 1907.....			\$69,034.59
Less interest included paid from ore proceeds, as below.....			11,318.53
			<u>\$57,716.06</u>

No ore was mined and removed from the Conkling ground prior to May 1, 1907. Between that date and June 30, 1910, the Silver King Coalition Mines Co. mined not to exceed the tonnage stated below from the said Conkling ground and the gross value per ton, less freight and treatment charges, was as set forth below.

The ore mined from the Conkling ground from May 1, 1907, to Dec. 31, 1907, and the value thereof at \$32.91 per ton for first class or shipping ore and \$14.11 per ton for milling ore was as follows:

420

2542.96 T. shipping ore, 3058.25 T. milling ore,	
value	\$126,840.72

The expense chargeable to ore mined in the Conkling ground during 1907, was as follows:

Mining 5601.21 T. at \$4.50 per T.....	\$25,205.44
Milling 3058.25 T. at \$1.10 per T.....	3,364.08
Tramming and sampling 2542.96 T. shipping ore at 42.1¢.....	1,070.58
Tramming and sampling 1063.7 T. concentrates at 42.1¢.....	447.82
Development expenditure within Conkling claim.....	4,335.59
	<hr/>
	\$34,423.51

Net proceeds.....	\$92,417.21
Less interest to May 1, 1907, applied against proceeds	11,318.53

\$81,098.68

Balance in favor of Conkling claim at Dec. 31, 1907 (less interest on account of improvements as hereinafter shown).....	\$23,382.62
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The ore mined from the Conkling ground during the year 1908, and the value thereof at \$32.91 per ton for first class or shipping ore and \$14.11 per ton for milling ore was as follows:

397.5 T. shipping ore, 2808.3 T. milling ore, value..	\$52,706.84
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The expense chargeable to the ore mined in the Conkling ground during 1908 was as follows:

Mining 3205.8 T. at \$4.50 per T.....	\$14,426.10
Milling 2808.3 T. at \$1.10 per T.....	3,080.13
Tramming and sampling 397.5 T. shipping ore at 42.1¢.....	167.35

Tramming and sampling 976.8 T. concentrates at 42.1¢.....	411.23	
Development expenditure within Conkling claim	4,161.16	
	<hr/>	\$22,254.97

Net proceeds ore..... \$30,451.87

Add interest at 8% on \$23,382.62 (balance in favor of Conkling claim at Jan. 1, 1908) for 1 year.....	1,870.61
Balance in favor of Conkling claim at Dec. 31, 1908 (less interest on account of improvements, as hereinafter shown).....	\$55,705.10

The ore mined from the Conkling ground during the year 1909, and the value thereof at \$33.91 per ton for first class or shipping ore and \$14.48 per ton for milling ore was as follows:

1145.3 T. shipping ore, 7870.6 T. milling ore, value.. \$152,803.41

The expense chargeable to ore mined in the Conkling ground during 1909 was as follows:

Mining 9015.9 T. at \$4.50 per T.....	\$40,571.55
Milling 7870.6 T. at \$1.10 per T.....	8,657.66

430.

Tramming and sampling 1145.3 T. shipping ore at 42.1¢.....	482.17
Tramming and sampling 2737.6 T. concentrates at 42.1¢.....	1,152.55
Development expenditure within Conkling claim	900.00
	<hr/>
	51,763.91

Net proceeds ore..... \$101,039.50

Add interest for 1 yr. at 8% on (\$53,834.49 (balance in favor of Conkling claim at Jan. 1, 1909, less \$1870.61 Int. included therein)	4,306.76
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Balance in favor of Conkling claim at Dec. 31, 1909 (less interest on account of improvements, as hereinafter shown) 161,051.26

The ore mined from the Conkling — for 6 mos. to June 30, 1910, and the value thereof at \$33.91 per ton for First Class or Shipping Ore and \$14.48 per ton for Milling Ore was as follows:

214.2 T. Shipping Ore, 1821.6 T. Milling Ore—Value. \$33,640.20

The expense chargeable to Ore mined in the Conkling ground from January 1, 1910, to June 30, 1910, was as follows:

Mining 2035.8 T. at \$4.50 per ton.....	\$9,161.10
Milling 1821.6 T. at \$1.10 per ton.....	2,003.76
Tramming and Sampling 214.2 T. shipping Ore at 42.1¢.....	90.18
Tramming and Sampling 633.6 T. Concentrates at 42.1¢.....	266.75
	<hr/> 11,521.79

Net proceeds Ore.....	\$22,145.50
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Add 6 mos. interest at 8% on \$154,873.90 (balance at Dec. 31, 1909, less \$6,177.37 interest included therein).....	6,194.96
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	<hr/> \$160,364.82
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From said sum of \$160,364.82 the defendant claims that there is to be deducted a sum of \$21,940.05, on account of interest rateably chargeable to the Conkling claim on moneys invested by defendant in its mine and mill buildings, machinery, tools, tramway, etc. (all of which were used, and necessarily used, in the mining, extraction, treatment, and marketing of ores taken by the defendant from the Conkling claim), as shown by Schedule 1, hereto annexed, leaving a balance of \$167,424.77.

No work was undertaken in the Conkling ground during the period from June 30, 1910, to April 1, 1913, and no ore was extracted or sold therefrom.

The balance in favor of the Conkling claim at June 30, 1910, was (as heretofore shown).....	\$167,424.77
Interest at 8% per annum from July 1, 1910, to Dec. 31, 1912, on \$167,424.77.....	33,484.95
Balance in favor of Conkling claim at April 1, 1913 (Principal, \$167,424.77, Interest \$33,484.95).....	<hr/> 200,909.72

481

The ore mined from the Conkling ground from April, 1913, to Dec. 31, 1913, and the value thereof at \$33.91 per ton for First Class or Shipping Ore, and \$14.48 per ton for Milling Ore was as follows:

31.97 T. Shipping Ore, 86.38 T. Milling Ore—Value.	\$2,334.88
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The expense chargeable to ore mined in the Conkling ground from April 1, 1913, to Dec. 31, 1913, was as follows:

Mining 118.35 T. at \$4.50 per ton.....	\$532.58
Milling 86.38 T. at \$1.10 per ton.....	95.01

Tramming and Sampling 31.97 T. Shipping Ore at 42.1c.....	13.46	
Tramming and Sampling 30 T. Concentrates at 42.1c.....	12.63	
Development work in Conkling ground.....	1,944.00	
		<u>2,597.09</u>
Deficiency from Ore.....		\$262.80
Interest for 1 year to Dec. 31, 1913, at 8% on \$167,424.77. Balance (exclusive of interest) in favor of Conkling claim at Dec. 31, 1912.....	13,383.98	
		<u>13,131.18</u>
Balance in favor of Conkling Claim at Dec. 31, 1913, (Principal, \$167,161.97. Interest \$46,878.93).....		\$214,040.90

The ore mined from the Conkling Claim during the calendar year 1914, and the value thereof at \$34.91 per ton for First Class or Shipping Ore, and \$14.83 per ton for Milling Ore, was as follows:

002.7 T. Shipping Ore, 827.5 T. Milling Ore—Value.....	\$33,312.09
The expense chargeable to ore mined in the Conkling ground during the year 1914, was as follows:	
Mining 1430.2 T. at \$4.50 per ton.....	\$6,435.90
Milling 827.5 T. at \$1.10 per ton.....	910.25
Sampling and Tramming 002.7 T. Shipping Ore at 42.1c.....	233.74
Sampling and Tramming 287.8 T. Concentrates at 42.1c.....	121.16
Development work in Conkling ground...	<u>6,457.00</u>
	14,178.05

Net Proceeds Ore.....	\$19,134.04
Add Interest for 1 year at 8% on \$167,161.97, balance in favor of Conkling claim at Dec. 31, 1913, (exclusive of interest).....	<u>13,372.96</u>
	\$246,547.90
Deduct necessary cost of sinking winze to take ore below 500 level.....	<u>11,000.00</u>
Balance in favor of Conkling Claim at Dec. 31, 1914, (Principal \$175,296.01, Interest, \$80,251.89).....	\$235,457.90

The ore mined from the Conkling ground during the year 1915, and the value thereof at \$34.91 per ton for First Class or Shipping Ore, and \$14.83 per ton for Milling Ore, was as follows:

323.3 T. Shipping Ore 6357.1 T. Milling Ore—Value.....	\$165,562.19
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The expense chargeable to ore mined in in the Conkling ground in the year 1915, was as follows:

Mining 6980.4 T. at \$4.50 per ton.....	\$30,061.80
Milling 6357.1 T. at \$1.10 per ton.....	6,992.81
Sampling and Trammig 323.3 T. 8hip- ping Ore at 42.1c.....	136.11
Sampling and Trammig 2211.2 T. Con- centrates at 42.1c.....	930.92
Development work in Conkling ground...	2,078.00
	<hr/> 40,100.64

Net Proceeds Ore.....	\$95,302.55
Add interest for 1 year at 8% on \$175,296.01, bal- ance in favor of Conkling Claim At Dec. 31, 1914, (exclusive of interest)...	<hr/> 14,023.68

Balance in favor of Conkling Claim at Dec. 31, 1915, (Principal \$240,658.56, Interest \$74,275.57)	\$314,934.13
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The ore mined from the Conkling ground for three months to March 31, 1916, and the value thereof at \$14.83 per ton for Milling Ore, was 648.1 T. Milling Ore—Value	\$9,611.32
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The expense chargeable to ore mined in the Conkling ground in the 3 mos. to March 31, 1916, was as follows:

Mining 648.1 T. at \$4.50 per ton.....	\$2,916.45
Milling 648.1 T. at \$1.10 per ton.....	712.91
Sampling and Trammig 225.4 T. Concen- trates at 42.1c.....	94.89
Development work in Conkling ground....	1,150.00
	<hr/> 4,874.25

Net Proceeds Ore.....	\$4,737.07
Add 3 mos. interest to Mar. 31, 1916, at 8% on \$240,658.56, bal- ance in favor of Conkling claim at Dec. 31, 1915, (exclusive of interest)	4,813.17
Balance in favor of Conkling Claim at Mar. 31, 1916, (Principal, \$245,395.63, Interest, \$79,088.74).....	324,484.38
Interest at 8% per annum from Mar. 31, 1916, to July 10, 1917, on principal balance of \$245,395.63 at Mar. 31, 1916.....	<hr/> 25,063.93

Balance in favor of Conkling Claim July 10, 1917.....	\$349,548.20
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Of the balance of \$349,548.20 in favor of the Conkling Claim at July 10, 1917, there is due the Conkling Mining Co. a three-fourths interest which amounts to \$262,161.22.

SCHEDULE 1.

During the period from May 1, 1907, to March 31, 1916, the defendant had invested in mine and mill buildings, machinery, tools and tramway, a total of \$462,588.00, as follows:

Mine buildings	\$89,004.00
Mine machinery	49,206.00
433	
Mine blacksmith shop.....	5,861.00
Mine carpenter shop.....	1,161.00
Sampler building and machinery.....	88,876.60
Main tramway	41,129.00
Upper coal bin.....	3,742.60
Lower terminal	27,781.00
Water and fire system.....	27,745.00
Total.....	\$314,606.00
Mill building and machiner.....	\$145,212.00
Mill machine shop.....	2,681.00
	147,893.00
Total building, machinery and equipment.....	\$462,588.00

All of which buildings, machinery, trams, etc., were used and necessarily used in the mining, extraction, treatment, and marketing of the ores taken from the Conkling ground.

Interest at 8% per annum on the above expenditure should properly be charged against all ore mined and milled except that shipping (or first class) ore should not be charged with interest on Mill Expenditure. Such a charge from May 1, 1907, to March 31, 1916, would be as follows:

	Interest at 8% on—	Interest at 8% on—
8 months 1907.....	\$314,606.00	\$147,893.00
12 months 1908.....	\$16,783.73	\$7,887.63
12 months 1909.....	25,175.00	11,831.44
12 months 1909.....	25,175.00	11,831.44
6 months 1910.....	12,587.80	5,915.72
12 months 1914.....	25,175.00	11,831.44
12 months 1915.....	25,175.00	11,831.44

The following summary shows the total ore extracted each year from all of its properties, including that extracted from the Conkling claim, and the proportion of the above charge to be made to each ton:

Extracted.	Tons.	Interest.	Rate per ton.
1907	22,522	\$16,783.73	51c.
1908	40,710	25,175.00	61c.
1909	54,547	25,175.00	46c.
1910 (6 mo.)	20,007	12,587.80	61c.
1914	70,451.18	25,175.00	35.7c.
1915	68,720	25,175.00	37.7c.

Milled.

1907	19,360	7,887.63	41c.
1908	22,912	11,831.44	52c.
1909	31,286	11,831.44	38c.
1910 (6 mo.)	14,392	5,915.72	41c.
1914	52,725.77	11,831.44	22.4c.
1915	36,248	11,831.44	32.6c.

The tonnage extracted from the Conkling ground and the interest chargeable thereto is as follows:

Shipping Ore:

1907.	2,542.96 tons at	\$.51	.....	\$1,296.91
1908.	397.5 tons at	.61	.....	242.48
1909.	1,145.3 tons at	.46	.....	526.84

434

(6 mo.) 1910.	214.2 tons at	.61	.....	130.66
1914.	602.7 tons at	.351	.....	215.16
1915.	323.3 tons at	.377	.....	121.88

\$2,533.93

Milling Ore:

1907.	3,058.25 tons at	\$.92	.....	\$2,813.59
1908.	2,808.3 tons at	1.13	.....	3,173.38
1909.	7,870.6 tons at	.84	.....	6,611.30
(6 mo.) 1910.	1,821.6 tons at	1.02	.....	1,858.03
1914.	827.5 tons at	.581	.....	480.78
1915.	6,357.1 tons at	.703	.....	4,469.04

19,406.12

Grand total May 1, 1907, to March 31, 1916..... \$21,940.05

Respectfully submitted,

W. H. DICKSON.
 THOMAS MARIONEUX.
 A. C. ELLIS, JR.
 RUSSELL G. LUCAS.

Dated July 20, 1917.

Thereafter and in time allowed by the Court, plaintiff filed its brief and argument, and thereupon stated that, upon the assumption of the correctness of the defendant's shift boss records, there came out of the stopes during the last eight months of 1909, during which a separate account of the ores from the Conkling claim were kept, 894 cars of first class and 8,867 cars of second class.

The plaintiff also stated in its said brief that in the months from January 1st to June 30, 1910, (no ore was mined from the premises after June 30th of that year), there came out of the stopes, upon the

assumption of the correctness of the shift boss records, 284 cars of first class and 2,986 cars of second class.

In said brief counsel for plaintiff also claimed that upon the same assumption there were extracted in the year 1913, 80 cars of first class and 174 cars of second class.

The said brief of plaintiff also contained the following statement:

"We fail to understand why it is that counsel insist that, irrespective of markets or values of minerals or occurrences of the ore, we should be confined for nine years thereafter to the prices paid in June, 1907. Probably in this respect advantage is taken of the fact that we cannot trace the ores to the extent of showing the actual prices received for them. In this matter we appeal, as in the
435 earlier part of our brief, to the law governing confusion of goods."

Thereupon the defendant filed a reply brief in which it admitted that the shift boss records showed the number of cars extracted in the several years mentioned, as given by the plaintiff in its brief and as above stated, and in connection with the filing of its reply brief the defendant filed a petition for leave to amend its account to conform to the evidence as it viewed the same in its said reply brief, accompanying said petition with said amended account, and supporting this petition by affidavits. The same are as follows:

(Petition of Defendant for Leave to File an Amended Account.)

Now comes the defendant by its solicitors, W. H. Dickson and Thomas Marioneaux, and shows unto his Honorable Court that in its amended account filed herein, and in its account as set forth in its opening brief heretofore filed and served herein, certain errors have been made, some of which are to the detriment of the plaintiff and some of which are to the great and manifest detriment of this defendant.

I.—1909.

The shift bosses' records show 1174 cars of first class and 11,853 cars of second class for the last eight months of 1909, during which a separate account of the ores from the Conklings claim were kept, whereas the defendant's opening brief allows credit for only 1114 cars of first class and 10,845 cars of second class; and assuming the same proportionate numbers of cars were taken out in the first four months as in the last eight months, the plaintiff is entitled to — number of cars of first class and — number of cars of second class, or 1000.7 number of tons of first class and 7806 number of tons of second class, instead of 1145.3 tons of first class and 7870.6 tons of second class, as stated in our opening brief.

And the evidence shows also that if the cars extracted in this year be entirely disregarded and the cavity alone be taken as the basis,

the plaintiff is entitled to credit for 917.4 tons of first class and 8094.5 tons of second class.

II.—1910.

In the year 1910, the shift bosses' records show 284 cars of first class and 2986 cars of second class, instead of 204 cars of first class and 2208 cars of second class.

436

III.—1913.

In the year 1913, the correct amount of ore mined, according to Exhibit 48, is 80 cars of first class and 174 cars of second class, instead of 30 cars of first class and 113 cars of second class, as shown in the account in the defendant's opening brief.

IV.—1915.

For the year 1915, in our opening brief the defendant has credited the plaintiff with 308.16 cars of first class or, 323.3 tons; and 8,348.14 cars of second class, or 6,357.1 tons, where as the excavation in the Conkling claim for this year was only 42,242 cubic feet, one-half of which is shown by the testimony to be waste, leaving 21,121 cubic feet for ore; the excavation showing conclusively that the ore extraction record in the year 1915, grossly exaggerates the number of cars extracted.

The defendant's credit of tonnage to the plaintiff for this year based upon the ore extraction books, is grossly excessive, as is in effect admitted in the plaintiff's brief. The tonnage based upon the excavation should be 323 tons of first class and 1,822 tons of second class.

V.—Values.

This defendant further represents and shows to this Honorable Court that in its account on file herein, and as set forth in its original brief herein, it has, as stated by the plaintiff in its brief, "irrespective of markets or values of minerals * * * "credited the plaintiff for the ore extracted as follows: 1907, \$32.91 per ton for first class, and \$14.11 per ton for second class; the same for 1908; and for 1909, \$33.91 per ton for first class, and \$14.48 per ton for second class; for 1910, \$33.91 per ton for first class, and \$14.48 per ton for second class; for 1913, the same; for 1914, \$34.91 per ton for first class and \$14.83 per ton for second class; for 1915, the same; for 1916, \$14.83 for milling ore. (No first class having been extracted.)

This defendant further shows unto this Honorable Court that in crediting the plaintiff for the ore sold upon the bases aforesaid, the defendant's counsel acted purely upon assumption that there had

been no material change in the prices of metals prevailing at the time the defendant was paid by the smelter for the ores contained in the K-K shipments.

This defendant further shows unto this Honorable Court that the ore sales books and the smelter returns, which were produced
437 and laid before this Honorable Court and before opposite counsel upon the trial of this cause, and which books and smelter returns are substantially in evidence in this case, show that in the year 1907, after the K-K shipment, which was the first shipment of ore from the Conkling ground, the defendant made 102 shipments to the American Smelting & Refining Company, which were settled for under the Heinze contract, and show likewise the number of shipments made in each month of 1908, and the number of shipments made in each month in 1909, 1910 (During the months the common property was operated); the number of shipments made in the year 1913, 1914, 1915 and 1916.

This defendant further shows that said books contained columns showing the prices upon the basis of which the Smelting Company paid the defendant for the head, silver and gold contained in all the aforesaid shipments, which shipments included all ore extracted from the Conkling ground.

Defendant further shows that by adding the prices received by the defendant for the lead, silver and gold in said shipments in each month of the aforesaid period, the average prices paid by the Smelting Company to the defendant for lead, silver and gold under the Heinze contract can be determined for each month, and then by adding the monthly averages the average price received by the defendant under its contract with the Smelting Company for the lead, silver and gold contents of the ores extracted from the Conkling ground in each year in question can be determined.

This defendant further shows unto this Honorable Court that upon receiving the plaintiff's brief herein and reading the second paragraph on Page 72 thereof, its counsel inquired of its auditor, Mr. Scholefield, whether the books would not furnish more definite information as to the values of the metals in the various years and the amounts paid by the Smelting Company to the defendant for the metals contained in the ores shipped to it under the Heinze contract, and thereupon, this defendant says that the said books were examined, being withdrawn from the files of the court by the consent of the plaintiff's counsel, and the foregoing information was discovered to be contained therein, except as to five months in the year, 1913, when the prices of the metals were not given in said books.

This defendant further shows that its counsel has procured Mr. Scholefield, who was a witness in this cause, to examine the said books and ascertain the average price received by the defend-
438 ant company from the smelting company for the metals contained in the ore shipped to it during all the periods aforesaid, and Mr. Scholefield has furnished to this defendant's counsel tabulations exhibiting the average prices received by the defendant for the lead, silver and gold contained in all the ore shipments

made during all the times aforesaid, after making the deductions provided for in the contract, and showing the net prices, and therefore the full total sum received by the defendant from all the ores shipped from the Conkling ground upon the basis of tonnage shipped, and upon the basis of value as determined by the value of the K-K shipment; and this defendant says that said books show, and that the truth is, that the supposition of counsel that the prices of metals had not substantially varied after the K-K shipment in 1907, until after 1916, and the assumptions included in the accounting whereby the value of the tonnage was placed at the figures hereinbefore set forth, are entirely erroneous, to the great detriment of this defendant, as is shown by the affidavit of Mr. Scholefield hereto attached and filed with this petition, for that by said assumptions made without the examination of said books, the plaintiff has been overcredited, (when there is added the result of the errors in tonnage), the sum of \$188,126.03.

This defendant further shows that the smelter returns presented in court and used by counsel on both sides, and now in the custody of the court, which show all the shipments aforesaid, also disclose the information contained in said books.

This defendant further shows unto this Honorable Court that it has procured from W. Reed, of the Auditing Department of the American Smelting & Refining Company, an affidavit in corroboration of what is herein set forth, and in corroboration of its own books, and attaches said affidavit hereto and makes it a part of this petition as Exhibit "B."

This defendant further shows unto this Honorable Court that it has prepared an amended account to conform to the foregoing fact and show the amount due to the plaintiff when the foregoing corrections and in tonnage are made in the years 1909, 1910, 1913, and 1915, and conform to the facts shown by the ore sales books as to the prices received for the metals contained in the Conkling ores.

Wherefore, this defendant prays this Honorable Court that this court take further evidence herein at a time to be appointed, in order that defendant may show the errors pointed out in this
439 petition; and in order that it may introduce in evidence especially all said smelter returns, and that its said ore sales books may be introduced for the purpose of showing the facts hereinabove set forth; and in order that it may examine its secretary, Mr. Frank J. Westcott, and Mr. Scholefield as to the contents of said books and in order that Mr. Scholefield may testify to the correctness of the tabulations set forth in his affidavit, Exhibit "A" and that it may also examine Mr. Reid in respect to the matters contained in his affidavit, and also in regard to the average price paid by the Smelting Company to the defendant company for lead, silver and gold contained in its shipments during the years aforesaid, to the end that this defendant may amend its account herein to conform to the evidence and to the truth.

And this defendant further prays that it may be allowed to file the aforesaid amended account, a copy of which is attached hereto and

has been served with this application upon the plaintiff's counsel this day, and this defendant will ever pray.

SILVER KING COALITION
MINES COMPANY,
By F. J. WESTCOTT,
Secretary.
W. H. DICKSON,
A. C. ELLIS,
T. MARIONEUX,
Solicitors for Defendant.

Dated: September 15, 1917.

DICKSON, ELLIS & LUCAS,
MARIONEUX, STRAUP, STOTT & BECK,
Of Counsel.

STATE OF UTAH,
County of Salt Lake, ss:

Frank J. Westcott, being first duly sworn on his oath, says:

That he is the Secretary of the defendant corporation, and the custodian of its books.

Affiant further says that he has read the foregoing petition and motion and the affidavits referred to therein, and that he believes the same to be true.

FRANK J. WESTCOTT.

440 Subscribed and sworn to before me this 15th day of September, 1917.

[SEAL.]

J. F. FITZPATRICK,
Notary Public.

My commission expires Dec. 9, 1918.

Endorsed: Filed in the District Court on Sept. 18, 1917.

(Affidavit of Thomas Marioneaux in Support of Petition for Leave to File an Amended Account, etc.)

STATE OF UTAH,
County of Salt Lake, ss:

Thomas Marioneaux, being first duly sworn on his oath, says:

That he is one of the solicitors for the defendant in the above entitled cause; that he has read and knows the contents of the foregoing petition for leave to introduce further testimony and the affidavits attached thereto, and that he believes the same to be true.

Affiant further says that this application to take further evidence in this cause is not made for the purpose of delay, but in order that justice may be done herein, and that the mistakes heretofore pointed out may be corrected.

Affiant further says that Mr. Dickson, chief solicitor for the defendant in this cause, -as called away to California, (and now is in said

State) before Mr. Scholefield had completed the tabulations attached to his affidavit, and that on account of the absence of Mr. Dickson, no affidavit, from him is attached hereto; but affiant says that Mr. Dickson has informed this affiant that the information as to the average prices received by the defendant company for the metals contained in the shipments referred to in this petition, was never called to his attention by any officer or agent of the defendant company, and he was never aware of the same until after the coming in of the plaintiff's brief in this cause, and that he had assumed in preparing the account that there had been no material change in the prices paid for gold, silver and lead after the time the Smelting Company settled with the defendant for the ores contained in the K-K shipments, and that it was on that account that (as the plaintiff says in his brief) the plaintiff was confined in the account for nine years thereafter to the prices paid in June, 1907; but that in acting upon that assumption there was no intent, as the plaintiff charges, to take advantage of the fact that the plaintiff could not trace the ores to the extent of showing the actual prices received for them; and this affiant says that he never had any knowledge or information until the coming in of the plaintiff's brief as aforesaid, that there was any error in the account in taking the prices received for the metals contained in the K-K shipments as the basis for determining the value of the Conkling ores in all shipments made thereafter. Further affiant sayeth not.

THOMAS MARIONEUX.

Subscribed and sworn to before me this 17th day of September, 1917.

[SEAL.]

B. N. C. STOTT,
Notary Public.

My commission expires July 27, 1918.

Amended Statement of Account (Sept. 17, 1917).

Development Work Done by Silver King Company in Conkling and Arthur Claims.

Year.

	A.
1902. Cleaned out from station 131 to station 106 plus 13.8—2,079.5 ft. 100 ft. of this or thereabouts cost \$3.50 per ft., the balance \$1.25 per ft., according to Dailey's testimony	\$2,824.38
Crescent cross-cut run from station 1155 to station 1156 plus 22—cost \$12.00 per ft. 90.5 ft.	1,086.00
	<hr/> \$3,910.38

Interest on \$3,910.38 @ 8% from Jan. 1, 1903, to 5-1-07

1903. Crescent drift from station 106 plus 13.8 to Station 106 plus 78.8.... 65 ft. \$1,355.00

Crescent drift from station 1173

plus 11.5 to station 1174 plus 11. 89 ft.

At \$15.38 per ft..... 154 ft. 2,368.52

Crescent drift from station 106 plus

78.8 to Station 1176—2.5..... 35 ft.

Crescent drift from station 106 plus

78.8 to station 577 plus 6..... 974 ft.

Cross-cut south from station 1176.. 29.5 ft.

Cross-cut north from station 1177A. 15.5 ft.

Cross-cut north from station 653.. 17.0 ft.

Total at \$15.38 per ft.....1071.0 ft. 16,471.98

18,840.50

442

Interest on \$18,840.50 @ 8% from Jan. 1,

1904 to May 1, 1907..... \$5,024.12

1904. Work done in the Arthur Claim:

Tarbett drift from station 588 plus 7

to station 658 plus 11—total at

\$15.38 per ft..... 319 ft. 4,906.22

Crescent drift from station 577 plus 6

to station 604 plus 25 (Work done
in Conklings Claim)..... 207 ft.

Crescent drift from station 605 plus 10

to Station 660 (Work done in Conk-
ling Claim) 200 ft.

Crescent west from station 601 plus 10 38 ft.

Crescent west from station 605 plus — 23 ft.

Total @ \$26.186 per ft..... 468 ft. 12,255.05

Crescent drift from station 604 plus 25

to station 605 plus 10—total @

\$54.073 per ft..... 60 ft. 3,244.38

Cross-cut south from station 601 @

\$15.38 per ft..... 56 ft. 861.28

\$21,266.93

Interest @ 8% on \$21,266.93 from 1/1/05 to

May 1, 1907..... 3,980.03

1905. Crescent drift from station 660 to

station 664 185 ft.

Cross-cut southwesterly from station

661..... 65 ft.

Total @ cost of \$26.185 per ft. 250 ft. 6,546.25

McKay's cross-cut from station 600 to station 600 plus 130—cost \$12.00			
per foot	130 ft.	1,560.00	
		<hr/>	
		\$8,106.25	
Interest @ 5% on \$8,106.25 from 1/1/06 to 5/1/07.....			864.6
1906.	McKay's cross-cut from station 600 plus 130 to station 607 plus 40.5... 284 ft. K-K drift from station 1856 plus 2 to station 1857 plus 2..... 42 ft.		
	Total at \$12.00 per ft..... 326 ft.	\$3,912.00	
	Interest @ 5% on \$3,912.00 from 1/1/07 to 5/1/07.....		104.3
		<hr/>	
		\$56,036.06	\$11,318.3
443	Carry Forward.....	\$56,036.06	\$11,318.3
		<hr/>	
		R.	
	Brought Forward.....	\$56,036.06	\$11,318.3
1907.	Work done prior to May 1, 1907:		
	East drift from McKay's cross-cut prior to June 1, 1907, from station 1855 plus 2 to face 140 ft. @ 12.00 per ft.....	1,680.00	
		<hr/>	
		57,716.06	11,318.3
	Total expenditure and interest to May 1, 1907.....		69,654.3
	Less Interest included paid from ore proceeds as below..		11,318.3
			<hr/>
			\$57,716.0

No ore was mined and recovered from the Conkling ground prior to May 1, 1907. Between that date and June 30, 1916, the Silver King Coalition Mines Co. mined not to exceed the tonnage stated below from the said Conkling ground and the gross value per ton, less freight and treatment charges, was as set forth below.

In the following computations the ratio of concentration is taken as 2.875 and the value per ton is arrived at by using the actual metallic contents of the tonnage conceded, on the basis of the metallic contents of the K. K. lots, and calculating the value thereof at the average price of metals for each period less deductions for lead and silver, and freight and treatment charges, as set forth in detail in the defendant's reply brief.

The ore mined from the Conklings ground from May 1, 1907 to Dec. 31, 1907, and the value thereof @ \$36.22 per ton for First Class or Shipping Ore and \$32.80 per ton for Concentrates was as follows:

1883.81 T. Shipping ore	\$11.64 T. Concentrates—	
Value.....		76,615.28
659.15 T. Shipping ore	252.06 T. Concentrates—	
K. K. actual proceeds.....		31,918.87
258.91 T. Slimes @ \$3.81 per ton.....		986.44
		<hr/> \$108,520.59

The expense chargeable to ore mined in the Conklings ground during 1907 was as follows:

Mining 5601.21 T. @ \$4.50 per T.....	\$25,205.44
Milling 3058.25 T. @ \$1.10 per T.....	3,364.08
Tramming & Sampling 2542.96 T. Shipping Ore @ 42.1¢.....	1,070.56
Tramming & Sampling 1903.7 T. Concentrates @ 42.1¢.....	447.82
Development expenditure within Conklings claim	4,335.50
	<hr/> 34,423.31

Net proceeds.....	<hr/> 74,497.08
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Less interest to May 1, 1907, applied against proceeds	11,316.53	
	<hr/>	63,178.55

444 Balance in favor of Conklings claim at Dec. 31, 1907, (less interest on account of improvements as hereinafter shown).....		5,402.45
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The ore mined from the Conklings ground during the year 1908, and the value thereof @ \$30.26 per ton for First Class or shipping Ore and \$25.68 per ton for Concentrates was as follows:

397.5 T. Shipping Ore	976.8 T. Concentrates—Value.	33,137.57
223.98 T. Slimes @ \$2.67 per ton.....		597.98
		<hr/> 33,735.55

The expense chargeable to ore mined in the Conklings ground during 1908, was as follows:

Mining 3205.8 T. @ \$4.50 per T.....	14,426.10
Milling 2808.3 T. @ \$1.10 per T.....	3,089.13
Tramming & Sampling 397.5 T. Shipping Ore @ 42.1¢.....	167.35
Tramming & Sampling 976.8 T. Concentrates @ 42.1¢.....	411.23
Development Expenditure within Conklings claim	4,161.16
	<hr/> 22,254.97

	<hr/>	11,480.58
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Add Interest @ 8% on \$5,402.49 (balance in favor of Conkling Claim at Jan. 1, 1908), for 1 yr. Dec. 31, 1908.....	437.08
Balance in favor of Conkling claim at Dec. 31, 1908, (less Interest on account of Improvements as hereinafter shown)	17,359.07
Carried Forward.....	\$17,359.07
Brought Forward.....	\$17,359.07

The ore mined from the Conkling ground during the year 1909, and the value thereof @ \$21.73 per ton for First Class or Shipping Ore and \$27.12 per ton for Concentrates was as follows:

1000.7 T. Shipping Ore 2715.1 T. Concentrates—Value.....	\$65,386.79
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The expense chargeable to ore mined in the Conkling ground during 1909, was as follows:

Mining 8806.7 T. @ \$4.50 per T.....	\$39,630.15
Milling 7906 T. @ \$1.10 per T.....	8,286.60
Tramming & Sampling 1000.7 T. Shipping ore @ 42.1¢.....	421.29
Tramming & Sampling 2715.1 T. Concentrates @ 42.1¢.....	1,143.05
Development Expenditure within Conkling claim	900.00
	<u>50,081.09</u>

Net proceeds.....	41,705.70
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445

Add Interest for 1 Yr. @ 8% on \$16,513.07 (Balance in favor of Conkling Claim at Jan. 1, 1909, less \$437.00 Interest included therein).....	1,253.04
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Balance in favor of Conkling Claim at Dec. 31, 1909 (less Interest on account of Improvements as hereinafter shown).....	63,408.81
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The ore mined from the Conkling ground for 6 mos. to June 30, 1910, and the value thereof @ \$22.10 per ton for First Class or Shipping Ore and \$27.63 per ton Concentrates was as follows:

236.2 T. Shipping Ore 802 T. Concentrates—Value..	30,407.46
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The expense chargeable to ore mined in the Conkling ground during 1910, was as follows:

Mining 2778.58 T. @ \$4.50 per T.....	12,494.61
Milling 2478.38 T. @ \$1.10 per T.....	2,726.21

Tramming & Sampling 292.8 T. Shipping ore @ 42.1¢.....	123.27	
Tramming & Sampling 802 T. Concentrates @ 42.1¢.....	302.00	
	<hr/>	15,295.99
Net proceeds.....		14,709.47
Add Interest 6 Mos. @ 8% on \$61,618.77 (balance at Dec. 31, 1900, less \$1,790.04 Interest included therein)		2,464.75
Balance in favor of Conkling claim at June 30, 1910, (less Interest on account of Improvements as hereinafter shown).....		<u>\$60,574.03</u>

From said sum of \$60,574.03 the defendant claims that there is to be deducted the sum of \$19,909.91 on account of interest rateably chargeable to the Conkling claim on moneys invested by defendant in its mine and mill buildings, machinery, tools, tramway, etc., (all of which were used, and necessarily used, in the mining, extraction, treatment, and marketing of ore taken by the defendant from the Conkling Claim), as shown by Schedule 1, hereto annexed, leaving a balance of \$40,704.12.

No work was undertaken in the Conkling ground during the period from June 30, 1910, to April 1, 1913, and no ore was extracted or sold therefrom.

The Balance in favor of the Conkling claim at June 30, 1910, was (as heretofore shown).....	\$0,704.12
Interest at 8% per annum from July 1, 1910, to Dec. 31, 1912, on \$40,704.12.....	12,140.81
446 Balance in favor of Conkling Claim at April 1, 1913, (Principal \$40,704.12, Int. \$12,140.81).....	<u>72,844.93</u>
Carried Forward.....	\$72,844.93
Brought Forward.....	<u>\$72,844.93</u>

The ore mined from the Conkling ground from Apr. 1913, to Dec. 31, 1913, and the value thereof @ \$22.87 per ton for First Class or Shipping Ore and \$28.43 per ton for Concentrates was as follows:

65.24 T. shipping ore 46.2 T. Concentrates—Value...	3,262.83
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The expense chargeable to ore mined in the Conkling ground during 1913, was as follows:

Mining 218.00 T. @ \$4.50 per T.....	981.40
Milling 132.85 T. @ \$1.10 per T.....	146.13

Tramming & Sampling 85.24 T. Shipping Ore @ 42.1¢.....	35.88
Tramming & Sampling 46.2 T. Concentrates @ 42.1¢.....	19.45
Development Expenditure within Conkling ground	1,944.00
	<hr/> 3,126.86

Net proceeds.....	136.97
Add Interest for 1 yr. at 8% to Dec. 31, 1913, on \$60,704.12, balance in favor of Conkling claim at Jan. 1, 1913 (exclusive of interest).....	4,856.32

Balance in favor of Conkling claim at Dec. 31, 1913, (Principal \$60,841.09, Int. \$16,997.13).....	77,838.22
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The ore mined from the Conkling ground during the Calendar year 1914, and the value thereof @ \$20.66 per ton for First Class or Shipping Ore, and \$25.53 per ton for Concentrates was as follows:

602.7 T. Shipping Ore 287.8 T. Concentrates—Value. 19,800.63

The expense chargeable to ore mined in the Conkling ground during 1914, was as follows:

Mining 1430.2 T. @ \$4.50 per T.....	6,435.90
Milling 827.5 T. @ \$1.10 per T.....	910.25
Tramming & Sampling 287.8 T. Concentrates @ 42.1.....	121.16
Tramming & Sampling 602.7 T. Shipping ore @ 42.1¢.....	253.73
Development Expenditure within Conkling ground	6,457.00
	<hr/> 14,178.04

Net proceeds.....	5,622.59
Add Interest for 1 yr. at 8% on \$60,841.09, balance in favor of Conkling claim at Jan. 1, 1914 (exclusive of interest).....	4,867.29

447 Deduct necessary cost of sinking winze to take out ore below 500 level.....	88,328.10
	<hr/> 11,000.00

Balance in favor of Conkling claim at Dec. 31, 1914, (Principal \$55,463.68 Int. \$21,864.42).....	77,328.10
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The ore mined from the Conkling ground during the calendar year 1915, and the value thereof @ \$24.48 per ton for First Class or Shipping Ore and \$30.99 per ton for Concentrates was as follows:

323 T. Shipping ore 633.7 T. Concentrates—Value.. 27,548.28

The expense chargeable to ore mined in the Conkling ground during 1915 was as follows:

Mining 2145 T. @ \$4.50 per T.....	9,052.50	
Milling 1822 T. @ \$1.10 per T.....	2,004.20	
Tramming & Sampling 323 T. Shipping ore @ 42.1¢.....	135.98	
Tramming & Sampling 633.7 T. Concentrates @ 42.1¢.....	266.78	
Development Expenditure within Conkling claim	2,078.00	
	<hr/>	14,137.46

Net proceeds.....	13,410.82
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Add interest for 1 yr. @ 8% on \$55,463.68 balance in favor of Conkling claim at Jan. 1, 1915, (exclusive of interest).....	4,437.00
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D.

Balance in favor of Conkling claim at Dec. 31, 1915, (Principal \$68,874.50, Int. \$26,301.51).....	95,176.01
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Carried Forward.....	\$95,176.01
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Brought Forward.....	\$95,176.01
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The ore mined from the Conkling ground for three months to Mar. 31, 1916, and the value thereof @ \$42.88 per ton for Concentrates was as follows:

225.4 T. Concentrates—Value.....	9,664.74
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The expense chargeable to ore mined in the Conkling ground during 3 Mos. to Mar. 31, 1916, was as follows:

Mining 648.1 T. @ \$4.50 per T.....	2,916.45	
Milling 648.1 T. @ \$1.10 per T.....	712.91	
Tramming & Sampling 225.4 T. Concentrates @ 42.1¢.....	94.89	
Development Expenditure within Conkling ground	1,150.00	
	<hr/>	4,874.25

Net proceeds.....	4,790.49
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Add Interest for 3 mos. to Mar. 31, 1916 @ 8% on \$68,874.50 balance in favor of Conkling claim at Jan. 1, 1916 (exclusive of interest).....	1,377.49
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Balance in favor of Conkling claim at Mar. 31, 1916 (Principal \$73,664.99 Int. \$27,679.00).....	\$101,343.99
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448	Interest at 8% per annum from Mar. 31, 1916, to Sept. 19, 1917, on Principal balance of \$73,664.99 at Mar. 31, 1916.....	8,670.29
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Balance in favor of Conkling claim Sept. 19, 1917.....	\$110,014.28
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Of the balance of \$110,014.28 in favor of the Conkling Claim at September 19, 1917, there is due to the Conkling Mining Co. a three-fourths interest which amounts to \$82,510.71.

NOTE.—The total values as shown exceed the calculated value by small amounts which are necessary to bring same to the total of the value of the metallic contents as stated in Defendant's reply brief.

SCHEDULE 1.

During the period from May 1, 1907, to June 30, 1910, the defendant had invested in Mine and Mine Buildings and Machinery and Tools and Tramway, a total of \$462,588.00 as follows:

Mine Buildings	\$69,094.00
Mine Machinery	49,306.00
Mine Blacksmith Shop.....	5,861.00
Mine Carpenter Shop.....	1,161.00
Sampler Buildings and Machinery.....	88,876.00
Main Tramway	41,129.00
Upper Coal Bin.....	3,742.00
Lower Terminal	27,781.00
Water and Fire System.....	27,745.00
	<hr/>
	\$314,695.00
Mill Building and Machinery.....	\$145,212.00
Mill Machine Shop.....	2,681.00
	<hr/>
	147,893.00
	<hr/>
Total Building, Machinery and Equipment.....	\$462,588.00

All of which buildings, machinery, trams, etc., were used and necessarily used in the mining, extraction, treatment, and marketing of the ores taken from the Conkling ground.

Interest at 8% per annum on the above expenditure should properly be charged against all ore mined and milled except that shipping (or first class) ore should not be charged with interest on Mill Expenditure. Such a charge from May 1, 1907, to June 30, 1910, would be as follows:

	Interest at 8% on \$314,695.00.	Interest at 8% on \$147,893.00.
8 months 1907.....	16,783.73	7,887.63
12 months 1908.....	25,175.60	11,831.44
12 months 1909.....	25,175.60	11,831.44
6 months 1910.....	12,587.80	5,915.72
12 months 1914.....	25,175.60	11,831.44
12 months 1915.....	25,175.60	11,831.44

49 The following summary shows the total ore extracted each year from all of its properties, including that extracted from the Conkling claim, and the proportion of the above charge to be made to each ton:

Extracted.	Tons.	Interest.	Rate per ton.
1907	32,532	\$16,783.73	51¢
1908	40,710	25,175.60	61¢
1909	54,547	25,175.60	46¢
1910 (6 mos.)	20,607	12,587.80	61¢
1914	70,451.18	25,175.60	35.7¢
1915	66,720	25,175.60	37.7¢
Milled.			
1907	19,360	7,887.63	41¢
1908	22,912	11,831.44	52¢
1909	31,286	11,831.44	38¢
1910 (6 mos.)	14,392	5,915.72	41¢
1914	52,725.77	11,831.44	22.4¢
1915	36,248	11,831.44	32.6¢

The tonnage extracted from the Conkling ground and the interest chargeable thereto is as follows:

Shipping ore:

907.	2,542.96	Tons	@ 51¢	\$1,296.91
908.	397.5	"	@ 61¢	242.48
909.	1,000.7	"	@ 46¢	460.32
910.	298.2	"	@ 61¢	181.90
914.	602.7	"	@ 35.1¢	215.16
915.	323.	"	@ 37.7¢	121.77
				\$2,518.54

Milling ore:

907.	3,058.25	"	@ 92¢	2,813.59
908.	2,808.3	"	1½ \$1.13	3,173.38
909.	7,806.	"	@ \$.84	6,557.04
910.	2,986.	"	@ \$1.02	3,045.72
914.	827.5	"	@ 58.1¢	480.78
915.	1,822.	"	@ 70.3¢	1,280.86
				17,351.37
				19,869.91

(EXHIBIT A.)

Affidavit of J. B. Scholefield in Support of Defendant's Petition for Leave to File an Amended Account, etc.

STATE OF UTAH,
County of Salt Lake, ss:

J. B. Scholefield, being first duly sworn on his oath, says:
450 That he is the same person who testified as a witness in this cause upon the accounting, before his Honor Judge Johnson.

Affiant further says that he has, at the request of counsel for the defendant, examined the ore record books of the Silver King Coalition Mines Company and the Kearns-Keith Mining Company, which were used upon the hearing in this cause, and which were offered in evidence or offered for identification, and which were marked by the reporter as exhibits in this cause.

Affiant further says that within the past few days, by agreement of plaintiff's counsel, Mr. Critchlow, communicated by him to the Clerk of this court, affiant, was permitted to take from the Clerk's office said two books introduced and marked in this cause as aforesaid.

Affiant further says that said Kearns-Keith ore shows that the metallic contents of the four lots of first class ore and two lots of concentrates, referred to generally in this cause as the K-K shipments of 1907, show the following metallic contents:

	Lead.	Silver.	Gold
First Class Ore.....	459,257.07 lbs.	13,804.26 oz.	33.75 oz.
Concentrates	209,245.61 lbs.	5,680.22 oz.	12.11 oz.

Affiant further says that the total weight of shipments of these lots was first class 659,155 tons; concentrates 252,062 tons.

Affiant further says that the average metallic contents per ton shipped, based upon the tonnage shipped as aforesaid and the total metallic contents of said tonnage, was as follows:

First Class:

Lead, 696.73 pounds per ton shipped.
Silver, 20.94 ozs. per ton shipped.
Gold, .05 oz. per ton shipped.

Concentrates:

Lead, 830.13 pounds per ton shipped.
Silver, 22.53 ozs. per ton shipped.
Gold, .048 oz. per ton shipped.

451 Affiant further says that applying the metallic contents per ton, which have been above stated, to the total weight of ore

taken from the Conklings ground each year, as per the final account of the defendant company, the following total metallic contents are shown to be contained in said ore taken from the Conklings ground, exclusive of the said Kearns-Keith lots:

CRUDE.

	Tons.	Lbs. lead.	Oz. silver.	Oz. gold.
1907 - 8 mos.	1,883.81	1,312,506.94	39,446.98	94.19
1908.	397.5	276,950.17	8,323.65	19.87
1909.	1,000.7	697,217.71	20,954.65	50.03
1910 - 6 mos.	298.2	207,764.88	6,244.30	14.91
1913 - 8 mos.	85.24	59,389.26	1,784.92	4.262
1914.	602.7	419,919.17	12,610.53	31.12
1915.	323.	225,043.79	6,763.62	16.15

CONCENTRATES.

	Tons.	Lbs. lead.	Oz. silver.	Oz. gold.
1907 - 8 mos.	811.64	674,766.71	18,286.24	38.06
1908.	976.8	810,870.98	22,007.30	46.88
1909.	2,715.1	2,253,885.06	61,171.20	130.32
1910 - 6 mos.	862.0	715,572.06	19,420.86	41.376
1913 - 8 mos.	46.2	38,352.0	1,040.88	2.217
1914.	287.8	238,911.41	6,484.13	13.81
1915.	633.7	526,053.38	14,277.26	30.417
1916 - 3 mos.	225.04	187,111.30	5,078.26	10.82

Affiant further says that he has examined the aforesaid Silver King Coalition Mines Company's ore record (in evidence in this cause as aforesaid) to determine therefrom the average price actually received by the said Company for the lead and silver contained in all shipments made by that Company from June 1, 1907, to June 30, 1910, and from April 1, 1913, to March 31, 1916, and that he finds from said books that the average prices received by the Silver King Coalition Mines Company were as follows:

Lead Contained in First-class Ore Shipped.

1907	\$4.40	per hundred pounds.	
1908	\$3.80	" " "	
1909	\$4.35	" " "	
1910	\$4.34	" " "	
1913	\$4.29	" " "	
1914	\$3.87	" " "	
1915	\$4.71	" " "	
(3 mos. to Mar. 31) 1916	\$6.34	" " "	

452 Lead Contained in Concentrates Shipped.

1907	\$4.44	per	hundred	pounds.
1908	\$3.81	"	"	"
1909	\$4.34	"	"	"
1910	\$4.35	"	"	"
1913	\$4.27	"	"	"
1914	\$3.86	"	"	"
1915	\$4.62	"	"	"
(3 mos. to Mar. 31) 1916	\$6.35	"	"	"

Silver Contained in First-class Shipments.

1907	\$63.72¢	per	oz.
1908	52.69¢	"	"
1909	51.45¢	"	"
1910	53.55¢	"	"
1913	58.89¢	"	"
1914	54.55¢	"	"
1915	50.00¢	"	"
(3 Mos. to Mar. 31) 1916	57.61¢	"	"

Silver Contained in Concentrates Shipped.

1907	63.88¢	per	oz.
1908	52.81¢	"	"
1909	51.52¢	"	"
1910	53.59¢	"	"
1913	58.81¢	"	"
1914	54.55¢	"	"
1915	49.87¢	"	"
1916	57.32¢	"	"

Affiant further says that the price allowed for gold contents throughout the whole period of the Company's existence has been \$19.00 per oz.

Affiant further says that he has arrived at the foregoing average annual prices received by the Company for said metals, by taking the prices received for every shipment made in each of the years under consideration, all of which appear by said books, and dividing the same by the number of lots shipped in each month, thereby obtaining the monthly average, and then finding the yearly average by dividing the total of the monthly average by 12.

453 Affiant further says that the total number of lots shipped was as follows:

Crude.	1907.	1908.	1909.	1910.	1913.	1914.	1915.	1916.
January.....	4	9	7	..	6	12	8	..
February.....	3	12	7	..	6	15	8	..
March.....	4	10	7	..	6	13	8	..
April.....	5	11	6	..	6	12	..	..
May.....	5	12	5	7	3	14	..	..
June.....	9	7	9	4	9	4	12	..
July.....	8	12	11	..	6	5	11	..
August.....	11	11	11	..	7	6	13	..
September...	11	10	10	..	7	4	10	..
October.....	12	13	12	..	4	7	11	..
November...	11	11	10	..	7	10	5	..
December...	10	15	12	..	10	11	13	..
Totals.	72	100	120	36	57	74	141	24

CONCENTRATES.

January.....	3	4	3	..	4	4	4	..
February...	2	4	4	..	4	2	2	..
March.....	2	5	4	..	5	3	2	..
April.....	2	5	4	..	4	3	..	..
May.....	3	4	3	5	2	3	..	..
June.....	4	3	5	3	6	4	3	..
July.....	3	4	4	..	9	4	4	..
August.....	5	3	4	..	6	4	3	..
September...	4	4	3	..	4	4	3	..
October.....	6	4	3	..	3	5	2	..
November...	4	4	3	..	6	3	3	..
December...	4	4	6	..	7	3	2	..
Totals.	30	38	50	21	46	46	35	8

Affiant further says that applying the average prices heretofore stated to the metallic contents of the ore extracted from the Conklings ground as above stated, the amounts realized for said ore were as follows:

LEAD—CRUDE.

	Gross.	Less.		Net.
1907.....	\$57,750.30	10%	\$5,775.03	\$51,975.27
1908.....	10,524.10	10%	1,052.41	9,471.69
1909.....	30,328.97	19%	5,762.40	24,566.48
1910.....	9,016.99	19%	1,713.23	7,303.76
1913.....	2,547.80	19%	484.08	2,063.72
1914.....	16,250.86	19%	3,087.66	13,163.20
1915.....	10,590.56	19%	2,013.01	8,585.65
	\$137,018.58		\$19,888.81	\$117,129.77

SILVER—CRUDE.

1907.....	\$25,135.61	5%	\$1,256.78	\$23,878.83
1908.....	4,385.74	5%	219.28	4,166.45
1909.....	10,781.17	5%	539.05	10,242.12
1910.....	3,343.82	5%	167.19	3,176.63
1913.....	1,051.14	5%	52.55	998.59

454

1914.....	6,879.04	5%	\$343.95	6,535.09
1915.....	3,381.81	5%	169.09	3,212.72

	\$54,958.33		\$2,747.80	\$52,210.44
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SILVER—CONCENTRATES.

1907.....	\$11,081.25	5%	\$584.05	\$11,007.20
1908.....	11,022.05	5%	581.10	11,040.95
1909.....	31,515.40	5%	1,575.77	29,939.63
1910.....	10,407.63	5%	520.38	9,887.25
1913.....	612.14	5%	30.60	581.54
1914.....	3,537.00	5%	176.85	3,360.24
1915.....	7,120.07	5%	356.00	6,764.07
1916.....	2,910.85	5%	145.54	2,765.31

	\$79,406.48		\$3,970.20	\$75,436.19
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LEAD—CONCENTRATES.

1907.....	\$29,959.64	10%	\$2,995.96	\$26,963.68
1908.....	30,804.18	10%	3,080.41	27,804.77
1909.....	97,818.65	19%	18,585.54	79,233.11
1910.....	31,127.38	19%	5,914.20	25,213.18
1913.....	1,637.63	19%	311.15	1,326.48
1914.....	9,215.96	19%	1,751.03	7,464.93
1915.....	25,355.75	19%	4,817.59	20,538.16
1916.....	11,881.54	19%	2,257.49	9,624.05

	\$237,800.73		\$30,722.37	\$198,168.36
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GOLD—CRUDE.

1907.....	\$1,780.61
1908.....	377.53
1909.....	950.57
1910.....	283.20
1913.....	80.98
1914.....	591.28
1915.....	306.85

	\$4,380.11
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Gold—CONCENTRATES.

1907.....	\$740.24
1908.....	800.72
1909.....	2,476.08
1910.....	786.15
1913.....	42.12
1914.....	202.39
1915.....	577.93
1916.....	205.58

	\$5,981.21
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Affiant further says that the gross total value of such metallic contents at such average prices would be \$519,635.44, but that from such gross total value must be deducted the amounts deducted by the Smelting Company on lead and silver, and for freight and treatment charges which are as follows: (as shown by the smelter contracts produced by Mr. Bidwell)

Lead 10% of weight and 10% of price (except in 1907 and 1908, where the 10% on price has already been deducted on the Ore record).

Silver 5% of price.

455 Freight and Treatment charges to January 1, 1909, \$15.00 per ton Treatment charges to January from Jan. 1, 1909, to Jan. 1, 1914, \$14.00 per ton.

Freight and treatment charges since January 1, 1914, \$13.00 per ton.

Affiant further says that these deductions applied to the total amount of ore sold from the Conkling ground would amount to the following:

Lead	\$59,611.18
Silver	6,718.19
Freight and treatment charges.....	158,003.65

Making a gross total deduction of..... \$224,423.02

leaving a net amount realized of \$295,212.42, to which must be added \$31,918.87, representing the actual net amount realized from the shipments of K.K. ore heretofore referred to.

Affiant further says that the Conkling ore should be credited with \$1,554.42 for slimes sold by the Silver King Coalition Mines Company in the years 1907 and 1908, this credit representing the proportion of the total realized from Slimes which the Conkling ground concentrates bear to the total concentrates produced and sold per the Ore Record of the Silver King Coalition Mines Company.

Affiant further says that the net total amount received from the Smelting Company for the ores sold from the Conkling ground (taking the quantity from the defendant's reply brief) would therefore be \$328,685.71.

Affiant further says that he has computed the total amount which would have been realized upon the assumption that ore of the K. K. quality and value would realize the same metal prices throughout the whole period covering the accounting, which assumption is shown by the books and by this affidavit to be erroneous; that the total amount realized under said assumption was \$516,811.74, as shown by defendant's opening brief; but that the correct amount realized, as shown by an examination of said books introduced in evidence in this case, and as computed in this affidavit, was \$328,685.71, which constitutes a difference of \$188,126.03, and which difference should be deducted from the aforesaid total of \$516,811.74 allowed in said opening brief.

Affiant further says that the average price shown for 1913, was not

obtained from the said ore book, as the figures of prices realized for that period had not been inserted in said book, but that he obtained this average price from the figures inserted by the American Smelting & Refining Company at his request and according to their books as stated to affiant.

Affiant further says that he has used in his computations the prices of metals shown in the Ore Record of the Silver King Coalition Mines Co. after said prices had been compared by Mr. Reid of the American Smelting & Refining Co. with the records of that Company and had been corrected or completed in conformity with said record when such correction or completion was necessary.

J. B. SCHOLEFIELD.

Subscribed and sworn to before me this 15th day of Sept. 1917.

CLARENCE M. BECK,

Notary Public.

(EXHIBIT B.)

Affidavit of William Reid in Support of Defendant's Petition for Leave to File an Amended Account, etc.

STATE OF UTAH,

County of Salt Lake, ss:

William Reid, being first duly sworn, on his oath deposes and says:

That he is in the employ of the American Smelting and Refining Company, a corporation, doing business in Salt Lake City, Utah, with offices in the McCornick Block.

Affiant further says that at the request of the Silver King Coalition Mines Company he has examined its records of ore sales for the years 1907, 1908, 1909, 1910, 1913, 1914, 1915 and 1916. Affiant further says that said book, he is informed is, Exhibit No. 53, in the above entitled case.

Affiant further says that said book is ruled in parallel columns and the columns are headed as follows:

Silver King Coalition Mines Co.

457

Ore Book.

Date
Lot No.
Gross Weights Lbs.
Moisture %
New Wt. Lbs.

Total Gross Value
Commercial Value and charges:
Gross value per ton
Working charges Frt. etc.
Net proceeds per ton

Silver King Co. Assays:

Lead %
Silver Ozs. per ton
Gold ozs. per ton
Copper %
Zinc %
Sulphur %
Iron %
Silica %

Total net proceeds.

A. S. & R. Co. Assays:

Lead %
Silver Ozs. per ton
Gold ozs. per ton
Copper %
Zinc %
Sulphur %
Silica %
Iron %

Average Assays:

Lead %
Silver Ozs. per ton
Gold ozs. per ton
Copper %
Zinc %
Sulphur %
Iron %
Silica %

Basis of Price:

Date N. Y. quotation
Lead per cwt.
Silver per oz.
Gold per oz.
Copper per lb.

Values per ton:

Lead \$
Silver \$
Gold \$
Copper \$

Total Contents:

Lead lbs.
Silver ozs.
Gold ozs.
Copper lbs.

458 Affiant further says that he has examined the entries made in said book under the column "Basis of Price" and said entries are correct except in a few instances where affiant has corrected the records as follows:

The price of Lead from June 1907 to December 31st, 1908, is corrected by pencil figure of 90% to show that quotation is 90% of New York price for that period.

The following changes are also made:

	Original figure.	Changed to.
P. 17, February	1900-Silver 51—	51- $\frac{3}{4}$
P. 21 June	1900 " 50- $\frac{1}{4}$	51- $\frac{1}{4}$
P. 23, July	1900 " 50- $\frac{1}{4}$	51- $\frac{1}{4}$
P. 23, Sept.	1900 " 50-%	82-%
P. " "	" " 50-%	82-%
P. 47 May-	1913 All prices inserted.	
P. 47, June-	1913 All prices inserted.	
P. 48 July,	1913- Lead 4.32	4.325
" "	" " 4.42	4.425
" "	" " 4.32	4.325
" "	" " 4.47	4.475
" "	" " 4.42	4.425
" "	" " 4.32	4.325
" "	" " 4.32	4.325
" "	" " 4.32	4.325
" "	" " 4.32	4.325
" August	" " 4.32	4.3275
" "	" " 4.32	4.3275
" "	" " 4.32	4.325
" "	" " 4.27	4.275
" "	" " 4.26	4.2625
" "	" " 4.23	4.2375
" "	" " 4.32	4.325
" "	" " 4.32	4.325
" "	" " 4.07	4.075
P. 49, September,	1913 " 4.07	4.075
" "	" " 3.98	3.9875
P. 50, November,	1913- Inserted all prices.	
P. 50, December,	1913- Inserted all prices.	
P. 52, January,	1913-Silver 48-%	48-%

Affiant further says that in the above tabulation the original figures are the figures which appear upon the Ore Record Book of the Silver King Coalition Mines Company.

In that book the figures for May 1913 and June 1913 are not given and affiant inserted them in light lead pencil figures for the convenience of Mr. Scholefield; and in November and December 1913 the figures are not contained in said Mining Company's book and affiant inserted them in light lead pencil figures also for the convenience of

459 Mr. Scholefield. The column entitled above "Changed to" are the corrections made in light lead pencil figures on the Mining Company's book by this affiant. Affiant further says

that he made said insertions and made said corrections upon comparing the Mining Company's book with the books of the American Smelting & Refining Company.

Affiant further says that the books of the American Smelting and Refining Company have been correctly kept and are true, and show all the shipments made by said Mining Co. to said Smelting Co. during the Years 1907, 1908, 1909, 1910 * * * 1913, 1914, 1915, 1916, and the net prices received by the Mining Co. from the Smelting Company for the metals contained in the ores in said shipments;

Affiant further says that he has compared the books of the American Smelting & Refining Company with the Ore Sales Book of the Mining Company in all the years aforesaid under the column "Basis of Price" and said books agree except as to the changes noted in this affidavit.

Further affiant sayeth not.

WILLIAM REID.

Subscribed and sworn to before me this 17th day of September, 1917.

[SEAL.]

J. A. ARVIN,
Notary Public.

Amended account of defendant filed by leave of Court Sept. 22, 1917.

JOHN W. CHRISTY,
Clerk.

(Excerpt of Proceedings at Hearing on Defendant's Petition for Leave to File an Amended Account, etc.)

Said petition came on for hearing before the Court on Saturday, September 22, 1917, and said petition and affidavits being read to the Court, and no objection being made by the plaintiff, said amended account, accompanying said petition, was permitted to be filed.

In the course of said proceedings, Mr. Critchlow, counsel for plaintiff, stated:

"If the Court please, * * * in the first place I haven't any desire to prolong this matter, or to make it any more difficult than necessary to get the matters before the court. Our position was as indicated by the use which we made of various things which were connected with the ore book and the returns. Our position was that this ore book was before the court—ore sales book

460 Exhibit 33 was before the court; also, as stated by your Honor at one stage of the proceedings, the ore returns and their vouchers and checks and everything else of that kind, and accounts that were brought in here were, so to speak, in evidence for the use of either party, although not particularly marked as exhibits. I say that has been our understanding of it, and therefore the use which has been made by counsel of this ore sales book is not an

improper use at all. As we understand it the only thing here is that they are now in their argument making a use of the ore sales book which was not made or suggested at the time of the trial, and really, as it seems to us, the application here is made to introduce these things, this computation of Mr. Scholefield, and so forth, by way of amendment to their argument, rather than amendment to the testimony.

Now, of course, as stated by counsel this particular use of the ore book and ore returns was not called to our attention, and, of course, we will find it necessary to discuss this latest argument based upon this particular form of the use of the ore sales book.

I do not see that there is any necessity, if your Honor please, of having any further hearing in the case by way of formal introduction of proofs, unless upon our examination of these matters there seems to be either some error in the ore sales book or some omission of some relevant fact which ought to be introduced in view of the use of the book which is now being made in this argument. So that we do not see either that it is necessary that Mr. Scholefield come before the court to make these computations—our view being that with the aid of these arguments here which are contained in these affidavits, if the ore sales book and the returns, and so forth, are found by us to bear out the deductions arising from the calculations of Mr. Scholefield, why we would, of course, assume them correct. If we find any errors we shall, in answering that argument, make any observations or corrections upon that point and call attention to the book; so that it does not seem to us necessary to have any further opening of the case with that view.

The Court: Let me ask you if that includes the fact that since the trial apparently the book has certain pencil notations made in it that were not there when it was introduced?

Mr. Critchlow: We know Mr. Reid very well, and haven't the slightest desire to impugn either his accuracy or his good faith in the matter, and we can by consultation with him find out; 461 we know he will give us the same information that he has given to the other side, that is, we feel so; we feel confident of that and that we can go to him and get any explanation from him of anything we find in the books, and can undoubtedly get from him any information we desire that is contained in their books which is not now already suggested upon the ore sales books; so that we are not inclined to be captious about that at all and therefore I am assuming we shall have no trouble in that respect whatsoever. It really resolves itself to a question of whether Mr. Scholefield should come upon the stand and swear to computations in aid of your Honor's investigation and counsel's investigation of this. I will say that both sides have made use of the ore sales book by reason of making use of Mr. Scholefield's former computations of averages, to-wit, Exhibit 68; we made use of that and it was put in, as I understood Mr. Dickson, at the time for the purpose of showing the average value of the ores gotten by the whole mine during these years, so that the evidence as suggested now by counsel,—the argument suggested by counsel does not in any manner affect our

rights; it is simply in aid of the argument made by counsel for the defendant.

Mr. Marionéaux: Might I ask you, do you, as his Honor suggested, consider the ore book in evidence for all purposes?

Mr. Critchlow: Certainly; we have so considered it and shall continue to do so. * * * It may be upon reflection that we shall regard it unnecessary to even verify the ore sales book; * * * Whatever of criticism there may possible be—I don't know that there will be any—of the ore sales book, we shall make in our answer to your argument. Is that sufficient? * * *

It was here stipulated that the accounting as shown at the trial embodied in the defendant's first brief, and hereinbefore set out, should be deemed to be in evidence.

Mr. Critchlow: Now, as your Honor will observe, the account now filed and argued in the brief is not the one which we had the opportunity to reply to, and, of course, there will be no objection to our having that opportunity, and so I make a suggestion that a length of time be given to us to reply to this brief just filed (and which includes the account just now filed), and also an opportunity, upon notice to the other side, to call to the attention of the court any facts that we may think bear upon the special argument now made in this brief with reference to the ore sales book and returns.

462 (*Affidavit of W. H. Dickson in Support of Defendant's Petition for Leave to File an Amended Account, etc.*)

STATE OF CALIFORNIA,

City and County of San Francisco, ss:

W. H. Dickson, being first duly sworn, deposes and says: I am one of the counsel for the defendant in the above entitled suit, and as such, assisted in the preparation of said defendant's case in the matter of the accounting and in the hearing thereof; That at the time of the taking of the accounting, I knew that within one year, or thereabouts, prior thereto, there had been a marked advance in the market price of silver, and of lead, but I was under the erroneous impression that the fluctuations in the market price of these metals had been [*been*] comparatively slight during the period subsequent to May and June, 1907, when the four lots of shipping ore, and the two lots of concentrates, referred to in the testimony on the accounting, had been marketed in the name of the K. K. Company, and prior to the date when the last ore was mined by the defendant company from the premises in controversy. I was not aware that the fluctuations during that period had been, nor did it occur to me that they might have been, such as would materially affect the account between plaintiff and defendant, nor was my attention challenged to the fact that the fluctuations in the market price of these metals, during said period, were or might have been, such as to substantially affect that result, until after I received a copy of the last brief filed on behalf of the plaintiff company, in the matter

of the accounting. Had I known, or had I believed, that the fluctuations in the price of these metals, during the period aforesaid, had been such as to materially affect the accounting between the parties, I would not have failed to have offered evidence specifically addressed to the matter of these fluctuations, for the purpose of showing how, and to what extent, the account between the parties, plaintiff and defendant, would be affected thereby.

463 Subscribed and sworn to before me this 19th day of September, 1917.

[SEAL.]

FLORA HALL,
Notary Public in and for the City and
County of San Francisco,
State of California.

Copy received 9/21/17.

E. B. CRITCHLOW.

Endorsed: Filed in the District Court on Sept. 22, 1917.

Thereafter, and on the 27th day of February, 1918, the Court filed its Findings of Fact and opinion as to the principles upon which the amount due the plaintiff should be ascertained, which was as follows, namely:

(Opinion of the District Court.)

This case is now before the court for its determination upon the accounting ordered in the decision of the Circuit Court of Appeals in this cause reported in 230 Federal, 553.

A statement of the facts respecting the title of the common property of the parties and the matters out of which this litigation arose appears in the decision above cited, as well as in the opinion of Judge Marshall filed herein, and these facts require no re-statement at this time.

In this opinion I shall confine myself to a statement of the rules to be applied in stating the account herein, with a brief discussion of the reasons which have led to the adoption of these rules.

The record in this matter is voluminous but in many respects unsatisfactory, and the best that can be hoped for is an approximation of a true account between the parties.

By reason of the unsatisfactory state of certain of the evidence counsel for the plaintiff have urged in their briefs the arbitrary adoption of the rule adopted by Judge Marshall in respect to the classification of the ore in the Silver King case. It is to be noted, however, that counsel have not urged the application of the rule adopted by Judge Marshall in that case in respect to the cubical contents of a ton of ore in place. There are facts in evidence in this case which were lacking in the Silver King case. In this case the plaintiff

464 had access to the ore body and the cavities from which the ore had been removed from about the middle of the year 1908 until the date of the former trial and decision in this court. After the decision of Judge Marshall in favor of the defendant the plaintiff did not seek an entrance into the mine or access to the ore bodies or the stopes until after the case had been reversed by the Circuit Court of Appeals. In the Silver King case it appears that no attempt was made to keep an account of the quantity of ore removed from the mine or its classification, while in this case from about the first of May, 1909, books were kept in which a daily record was made of the cars removed from the mine with a classification of the ore. Upon the facts in evidence in this case I do not think the court would be justified in arbitrarily adopting the rule of classification applied by Judge Marshall in the Silver King case.

In this case the defendant has filed four separate accounts which differ from one another in respect to certain items contained in the account, and also in the final result. Certain of these changes in the body of the accounts have been called to the attention of the court and explained as arising from oversight or a change in theory in respect to the manner in which the account should be made up. Certain other changes have been made in the items of the account based apparently upon the opinion of witnesses called in the case, and respecting these changes no explanation has been made of any mistake upon the part of the defendant company or of any of its officers or agents who made up the accounts. I assume that each one of these accounts was made up by the defendant upon data known to its officers or responsible agents, or from information received by them which they considered reliable, and I am of the opinion that the data given in these accounts, made up in this way, should have great weight as expressing the best judgment of the defendant as to the fact, and, unexplained, should not be disregarded even though certain witnesses who testified in the case have given an opinion more favorable to the defendant.

In order to render a true accounting between the parties herein it is essential to have data upon several matters, namely: volume, classification, waste, metallic content of ore, and price. These matters will be considered in their order.

Volume.

The total cavity mined within the limits of the Conkling ground, as given by the witness Brooks, is as follows:

465

1907.....	50,000	cubic feet,
1908.....	37,120	" "
1909.....	104,295	" "
1910.....	29,355	" "
1913.....	4,505	" "
1914.....	18,246	" "
1915.....	42,242	" "
1916.....	16,410	" "

These figures are not disputed by the plaintiff and are, in fact, adopted by it in all of its calculations in making up what it claims to be the true account.

In the first and second accounts the defendant has used 9 cubic feet as representing the volume of a ton of first class ore, and 11 cubic feet as representing the volume of a ton of second class ore. In the third and fourth accounts it has used 7,275 cubic feet for first class ore, and 10.3 cubic feet for second class ore. The figures used in the first and second accounts are adopted from the findings of Judge Marshall in the Silver King case, except that in that case 12 cubic feet was used as representing the volume of a ton of second class ore. The figures used in the third and fourth accounts are arrived at from the experiment made by the witness Brooks with the ore samples taken by him from the stopes during the course of the trial.

The witness Taylor made calculations, based upon the data furnished by the defendant company with respect to the contents of the cavity on the 600 level and the quantity of ores taken therefrom, that seem to me to be entitled to greater weight in the decision of this question than any other evidence offered in the case and I shall adopt his conclusions, namely: 6 cubic feet for first class ore, 7.62 for second class ore.

Beginning with about the first of May, 1909, the defendant began to take ore from the mine at the 500 foot level of the Silver Hill shaft, and from that time on the ore was pegged showing its classification and an account kept of the classification of the ore from the pegging and the number of cars hoisted. The mine continued to be worked until about June, 1910, and then operations ceased until the latter part of 1913. The court would not be justified in disregarding these records and the testimony of the witnesses who were concerned in keeping them. The records may not be entirely accurate but they

466 more nearly approximate accuracy, I believe, than the method urged by the plaintiff in its brief. The approximate accuracy at least of the records was assumed in the calculation made by the witness Taylor upon which has been based the finding of the cubical contents of a ton of first and second class ore. As used by the witness Taylor these records give a fair and reasonable result, as I believe, with respect to the cubical contents of a ton of first and second class ore, and justifies their adoption in stating the account not only for the years 1914, 1915 and 1916, but for the year 1909 after the first of May, and for the year 1910.

Classification.

The ratio of first to second class ore for the year 1907 in defendant's first and second accounts is 1 to 2; in the third and fourth accounts, 1 to 1-1/5. Under the testimony it is uncertain what the exact proportion was of first to second class ore for this year, but from all the evidence I am led to the conclusion that as much as one-half of the ore removed during this year was first class ore.

For the year 1908 the ratio of first to second class ore, as given by the defendant in its first and second accounts, is 1 to 2; in its third

and fourth accounts, 1 to 7. The ratio of 1 to 7 presumably is based upon the recollection of certain witnesses called at the trial who mined in the Elephant stope during the year 1908 and who testified respecting this matter. Necessarily such evidence can have no great weight. The defendant, in making up its first and second accounts, presumably, as I have said, from the knowledge or recollection of its officers and agents, or from information received by it from others which it believed to be reliable, placed the ratio at 1 to 2. Considering this fact, together with the evidence given in the case by witnesses called by the defendant as well as those who testified for the plaintiff, I have reached the conclusion that the ratio of 1 to 2 is probably approximately correct.

As already intimated, the ratio of first class to second class ore for the years 1909 and 1910 and the years 1913, 1914, 1915 and 1916, will be based upon the classification shown by the shift boss books in evidence in the case.

Waste.

No waste is claimed by the defendant for the year 1907. In its first and second accounts the defendant gives the percentage of waste as "none" for the year 1908. In the third and fourth accounts, 14.3%. I do not believe the uncertain recollection of witnesses called in the case ought to outweigh the best judgment of the defendant at the time it made up its first and second accounts, presumably from information secured, as already suggested. That is especially true for this year in view of the testimony of the witnesses with respect to the appearance of the ore in the stope. No waste will be allowed for the year 1908.

For the years 1909 and 1910, and the years 1913, 1914, 1915 and 1916, an allowance of one-seventh for waste, under all of the facts in the case, probably more nearly approximates an average of the waste than any other percentage, and for each of these years one-seventh will be allowed for waste, where the matter of waste becomes important.

Metallic Content of Ore and Price.

In all of the accounts filed by the defendant it has assumed the metallic content of the entire ore body that is to be accounted for in this action to be the same as the metallic content of the K-K shipment, and in the first three accounts the price allowed for the metallic content of the entire body of ore was the same as the price received on the K-K shipment. The plaintiff, on the other hand, has ignored, except incidentally, the metallic content of the ores and adopted as a basis of the values of the ores the highest monthly averages of prices received by the defendant during any month of each of the several years covered by the account. This method was used by Judge Marshall in the Silver King case, Judge Marshall in that case saying: "There is no reliable evidence as to when the ores from this stope were marketed." In the case at bar it, I believe, sufficiently appears

that the ores removed by the defendant from the Conkling ground were marketed in due course and within probably thirty days from the time the ore was taken from the stopes, except the K-K shipments.

The evidence shows that the K-K shipments were taken from the Elephant stope, but from a consideration of all of the testimony in the case, as well as the lack of testimony upon certain essential matters, I am not satisfied that these shipments represent the value of all the ores taken from the Conkling ground. There is a remarkable dearth of testimony respecting the assay value of the ores taken during the period of nine years while the mine was operated, and in view of the fact that the defendant mixed the ores taken from the Conkling ground with other ores mined by it, upon the principle applicable in the case of a confusion of goods, the metallic content of the ore taken should be determined from the average metallic content of all the ore shipped by it from year to year during the period of this accounting, or, as a practical matter in making up the
468 account, disregarding the metallic content, the prices allowed for the ore in question should be based upon the yearly average prices received by the defendant for all the ores shipped by it, with the limitations hereinafter mentioned.

Applying the general rules above given in detail, the account for the several years will be made up as follows:

1907.

The returns of the K-K shipments as shown by the books of said company in evidence.

The tonnage of the K-K shipment reduced to its volume in cubic feet and deducted from the 50,000 cubic feet of excavation mined during this year.

The tonnage and classification of the balance of said excavation determined upon the data heretofore given, and the price thereof fixed by taking an average of the prices received by the defendant for all of its ores shipped for the months of June, July, August, September, October, November and December.

1908.

To be calculated from the data heretofore given, the value of the ore to be determined by the average of the prices received by the defendant for its ores during this year.

1909 and 1910.

The time beginning with May, 1909, or the date when ore first began to be hoisted from the 500 foot level of the Silver Hill shaft until the operations ceased in 1910, will be treated as one period, and the ratio of first and second class determined by the ratio of first and second class ore as shown by the records kept by the shaft bosses and others, in evidence in the case.

It is claimed in argument by the plaintiff that the Alliance cars, that is the cars used in hauling these ores were larger in size than the cars used upon the Silver King side. This is true, but there is no certainty, under the evidence, that any considerably greater weight of ore was hauled in them than was hauled in the smaller Silver King cars. But the controlling consideration in this matter of the weight of cars is that in the calculation made by the witness Taylor upon which the cubical content of a ton of first and second class ore is determined, the difference in the weight of the cars, if any, was not taken into consideration, and if the result of his calculation without this matter being considered gives the cubical content of a ton of first and second class ore in place, it seems to follow that the difference in weight in the cars, if any, ought to be disregarded in other relations.

The weight of the cars to be used in this calculation will be the weights of cars given by the witness Daly for this period, namely: 2,100 pounds for first class, 1,650 pounds for second class. From these figures, together with the cubical contents of a ton of ore as found by the witness Taylor, may be determined the quantity of the space excavated during the years 1909, 1910, occupied by the ores removed of which an account was kept; add to this quantity one-seventh for waste and deduct from the total cavity left by the ore removed during the years 1909 and 1910 leaves the cavity of the ores removed during the first four months of the year 1909 and of which no record was kept. Assuming the ratio of first and second class ore during this last mentioned period to be the same as that during the period from May, 1909 to June 1910, the amount of first and second class ore contained in this cavity may be determined from the data given; the price for the year 1909 to be the average price for the year as above indicated, and the price of the ores mined during the year 1910 to be the average of the price received by the defendant for ores during the first six months of said year.

1913.

The data for stating the account for the year 1913 is unsatisfactory. The cavity for that year, furnished by the witness Brooks, was 4,505 cubic feet. The ore, as given by the shift boss' books, leaves such a large proportion of this space to be occupied by waste as to seem unreasonable. Undoubtedly there is a mistake as to the volume of the cavity for this year, or the quantity of ore removed. The basis for calculation must, therefore, be more or less a surmise. As an approximation I have concluded to use the following: the ratio of first to second class as shown by the shift boss' books: percentage of waste one-seventh; volume of cavity 4,505 cubic feet. With this data and that heretofore given, the quantity and class of ore to be determined, and the price to be an average of the prices of the ores sold by the defendant company during the months of November and December, 1913, and January, 1914—it being prob-

able that some of this ore was marketed in the early part of the year 1914.

1914, 1915, and 1916.

The amount of first and second class ore as shown by the shift boss' books, the weights of the cars to be the same as those used by the witness Taylor in making his calculations; the price of
470 the ore for the year 1914 to be the average price of all the ores sold by the defendant during that year; the price for the year 1915 to be determined in the same manner; the price for 1916 to be the average price of the months during which the ore of that year was mined and marketed. It may be remarked in this connection that the discrepancies appearing when the years 1914, 1915 and 1916 are considered separately, disappear when treated as a unit, as was done by the witness Taylor in his calculations.

Slimes.

The value of all slimes accounted for, to be included in the account.

Interest.

Interest at the legal rate should be allowed on yearly balances to date of decree.

The defendant is entitled to credits as charges against the value of the ore accounted for, as above indicated, as follows: mining charges \$4.50, sampling \$0.221, tramping \$0.20, milling \$1.10, per ton; the reasonable expense of all development or dead work done within the limits of the Conkling ground, except in respect to the Alliance tunnel and branch tunnels therefrom as hereinafter stated. For such development or dead work and raises, the allowance will be the value claimed by the defendant in its account, except in those cases where witnesses called by the defendant have given a smaller sum as a reasonable value.

The driving of the Alliance tunnel was prosecuted by the predecessor in interest of the defendant for the purpose of developing the country lying to the west, of which country the Conkling ground was only a part. After having discovered the ore body in the Elephant stope the defendant acquired what is known as the Belmont property and made use of the Alliance tunnel during the years from 1907 to 1916 for the development of the Belmont property and the removal of the ores discovered therein, as well as the removal of the ores found in the Conkling ground. As I view it, it would be unjust to charge all the expenses of running this tunnel to the Conkling property, as it would be inequitable not to charge any of this expense to the Conkling ground. It may be true that at the present time this tunnel does not add any value to the Conkling property. For aught that appears in the record practically all of the ore in the Conkling ground has been removed, and tunnels upon a worked-

471 out mine never have any substantial value. The value of this tunnel to the Conkling property must be considered as of the time when the ore was discovered, rather than now when the ore has all been removed. On the other hand, this same tunnel has been used for nine years by the defendant in connection with its ownership of the Belmont property. Considered from the standpoint of what was equitable and right at the time that the ore bodies in those properties were first discovered and before they had been removed, and considered in the light of the fact that the defendant has made use of this tunnel in the removal of the ore from its Belmont property, I have reached the conclusion that one-half of the cost of running the Alliance tunnel and tunnels branching therefrom, within the limits of the Conkling ground, except the McKay crosscut, should be charged against the common fund. In this connection, however, it may be said that a part of the tunnel, in its progress through the Conkling ground, runs outside of and beyond the north line of the Conkling claim. At the trial of this cause the defendant stood upon its legal rights with respect to that part of the tunnel run outside of the north line of the Conkling claim, and that part of the tunnel should be excluded in making up this credit.

The defendant, in its account of the cost of this work, used the figures \$15.38, \$26.186 and \$54.073 which give to the account an air of accuracy to which it is not entitled. These figures are based upon the estimates made by the witness Walden, which, at best, can only be called rough estimates. As, under the evidence, only estimated values are possible, round numbers will be used in making up the account, namely: \$15.00, \$25.00 and \$50.00 will be used as approximations to the actual cost in running this tunnel.

Had the figures used in the account of the defendant been based upon the books and records of the Kearns-Keith Company, I should not hesitate to adopt them, and it is somewhat remarkable that in carrying on this work the Kearns-Keith Company failed to keep records of the expenditure incurred in its prosecution.

The defendant is entitled to credit for one-half of the cost of cleaning up the tunnel within the limits of the Arthur claim, but the price allowed for such work should be \$1.00 per foot where in the account the charge is \$1.25.

I do not believe the evidence sufficient to justify the court to require the defendant to account for these ores at a price higher than it actually received for them. It may be possible that, looking back, the flat rate provided in the Heinze contract may have proven unfavorable to the defendant in the marketing of its ores, 472 but I can find nothing in the evidence that would justify a finding that it was entered into in bad faith or for ulterior purposes.

Interest should be allowed at the legal rate upon yearly balances to the first day of May, 1907.

It is possible that the defendant should be allowed some credit for the use of its improvements, etc., during the period of these mining operations. There is no substantial evidence in the record

of the nature and extent of such use or of its reasonable value. I do not think a pro rata part of an interest charge upon the value of the defendant's improvements a legitimate basis for a determination of the value of such use. That item of the defendant's account will be disallowed.

No point has been made in the briefs of counsel with respect to the use by the defendant of the water flowing from the Alliance tunnel, and the defendant will not be required to account in respect thereto.

The plaintiff is requested to determine the amount due it upon a statement of the account as herein provided, and to submit such amount so found due to the court with a form of decree.

The defendant will be afforded opportunity to object to the amount so found by the plaintiff and for the correction of any errors which it may claim to have occurred in the calculation.

Endorsed: Filed in the District Court on February 27, 1918.

Thereafter and on March 12, 1918, the plaintiff submitted its calculations as to the amount due according to the foregoing Findings of Fact and opinion of the Court, which calculations were as follows:

Statement of Account.

Work Done in Conkling and Arthur Claims.

1902.

Cleaned out from 1254 feet west of sta. 131 to sta.		
106 plus 15.8 725 feet at \$1.00.....	\$725.	
Int. to May 1, 1907.....	200.	
	<hr/>	
	\$925.	\$492.50

1903.

Sta. 106 plus 13.8 feet to 106 plus 78.8 ft. 65 feet at \$15.00.....	\$975.	
Sta. 1173 plus 115 to Sta. 1174 plus 11.80 feet @ \$15.00	1735.	
473		
Cross cut south from Sta. 1176 20.5 ft. @ \$15.00...	442.50	
Sta. 106 plus 78.8 ft. to 1176 minus 2.5 35 feet at \$15.00	525.	
Sta. 1176 minus 2.5 to Sta. 567 plus 25 804 feet at \$15.00	12060.00	
	<hr/>	
	16237.50	
Int. to May 1, 1907.....	4330.00	
	<hr/>	
	20567.50	\$10283.75

1904.

Sta. 577 plus 6 ft. to Sta. 604 plus 25 151 feet at \$25.00	3775.	
Sta. 601 plus 10 to Bulkhead 38 ft. @ \$25.....	950.	
Sta. 605 plus 10 to Sta. 600 200 feet at \$25.00.....	5000.	
Sta. 601 South to face 56 feet @ \$15.00.....	840.	
Sta. 604 plus 25 to 605 plus 10 60 feet at \$50.00.....	3000.	
	<hr/>	
	13565.	
Int. to May 1, 1907.....	2532.13	
	<hr/>	
	10097.13	\$9045.56

1905.

Sta. 600 to Sta. 604 185 feet at \$25.00.....	4625.	
Sta. 601 Southwesterly 65 feet at \$25.00.....	1625.	
	<hr/>	
	6250.	
Int. to May 1, 1907.....	600.66	
	<hr/>	
	6850.66	\$3458.33
McKay Crosscut 130 feet at \$12.00.....	1560.	
Int. to May 1, 1907.....	105.40	
	<hr/>	
	1726.40	1726.40

1906.

McKay Cross Cut..... 284 feet		
K. K. Drift..... 42 "		
	<hr/>	
	326 "	
326 feet at \$12.00.....	3912.	
Int. to May 1, 1907.....	104.32	
	<hr/>	
	4016.32	4016.32

1907.

East Drift, 140 feet at \$12.00.....	1680.00	
	<hr/>	
Total Allowances to May 1, 1907.....		\$29705.86

Account from May 1, 1907.

1907.

Amt. received for K. K. Shipments:

659.155 tons 1st class }	
724.68 " 2nd class }	\$31,918.87

Ore mined. Excavation 50,000 c. f.

659.155 K. K. 1st class at 6 c. f. = 3954.93

724.68 " " 2nd " " 7.62 c. f. = 5522.96

Total 9477. c. f.

50,000—9477 = 40,523 c. f. 1st and 2nd class

In equal tonnage this supplies at 6 c. f. for 1st class and 7.62 c. f. for 2nd class.

2,975.25 tons 1st class

2,075.25 " 2nd " or 1,034.87 tons Concentrates

1,034.87 " at 31.9% = 330.1 tons Slimes.

Value of product:

2,975.25 tons at \$38.72.....	115,201.68
1,034.87 " " 44.81.....	46,572.82
330.1 " " 3.85.....	1,270.88
	<hr/> 162,845.38

Total	194,762.95
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Less Costs:

Mining 7334.33 tons at \$4.50.....	\$33,904.46
Milling 3606.93 " " 1.10.....	4,000.92
Sampling & Trimming 4921.34 tons at .421.....	2,071.86
Development	4,335.30
Debit from May 1, 1907.....	29,765.86
	<hr/> 73,187.73

Balance January 1, 1908.....	\$121,576.28
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1908.

Volume 37120 c. f.

1st class one third = 1747.65 Tons

2nd class two thirds = 3495.3 " = 1215.76 Concent's

Slimes, percentage, 18.65 being 6546.31 tons Conc'ts to 1183.7 Slimes.

Average value 1st class.....	\$46.42
" " Concentrates	37.93
" " Slimes	3.44

Value of product:

1747.65 tons at \$46.42.....	\$81,125.91
1215.76 " " 37.93.....	46,113.78
219.45 " " 3.44.....	754.90
	<hr/> \$127,994.59

Less Costs:

Mining 5242.95 tons at \$4.50.....	\$23,593.27	
Milling 3495.3 " " 1.10.....	3,844.83	
Sampling & Trimming 2503.41 tons at .421.....	1,247.59	
Development	4,161.16	
	<hr/>	
	32,846.85	32,846.85
Balance		<hr/>
		\$95,147.74

475

1909.

Cavity for year 1909 equals 104,285 cu. ft.

Cavity for year 1910 equals 29,355 " "

Total 133,650 " "

1/7 of total cavity (133,650 cu. ft.) equals waste (19,092.9 cu. ft.)

Total cavity (133,650 cu. ft.) less waste (19,092.9 cu. ft.) equals 114,557.1 cu. ft.

Cars according to Shift-Boss Records:

1909—1st class 884—2nd class 8952

1910—1st class 284—2nd class 2992

1168

11944

1168 cars 1st class with 2100 lbs. to car equals 1226.4 tons for 1909 and 1910.

11944 cars 2nd class with 1650 lbs. to car equals 9853.8 tons for 1909 and 1910.

1226.4 tons 1st class at 6 cu. ft. per ton equals 7358.4 cu. ft.

9853.8 tons 2nd class at 7.62 cu. ft. to ton equals 75096.0 cu. ft.

Total cu. ft. accounted for by cars for 1909 and 1910 82444.4 cu. ft.

114,557.1 cu. ft. minus 82,444.4 cu. ft. equals 32,112.7 cu. ft. of ore remaining in cavity.

Percentage 1st class as of total number cars removed equals 8.91%.

Percentage 2nd class as of total number cars removed equals 91.09%.

32,112.7 cu. ft. at 8.91% equals 2861.2 cu. ft. 1st class.

32,112.7 cu. ft. at 91.09% equals 29251.5 cu. ft. 2nd class—7.62 = 3838.78 tons.

2861.2 cu. ft. divided by 6 cu. ft. per ton equals 476.87 tons 1st class (cavity).

29251.5 tons divided by 2.875 (ratio) concentration equals 10174.22 tons concs.

1909.

1st class accounted for by cars	928.2 tons
1st class accounted for by cavity	476.87 tons
Total 1st class	1405.07 tons
1405.7 tons 1st class at \$40.79 per ton	\$57,312.80

1909 (Continued).

Brought forward from preceding page	\$57,312.80
8952 cars 2nd class equals 7385.4 tons.	
7385.4 tons divided by 2.875 (ratio concentration) equals	2568.83 tons
476	
Tons accounted for by cavity (cons.)	1335.22 "
Total Cons.	3904.05 tons
3904.05 tons cons. at \$37.39 per ton	145,972.43

Deductions.

Mining 12629.25 tons at \$4.50 per ton	\$56,831.63	
Milling 11224.18 tons at \$1.10 per ton	12,346.60	
Samp. and Tram. 5309.12 tons at \$0.421	2,235.14	
Drift north from Sta. 2347 to face 19 ft. at \$10.00 per ft.	190.00	
Drift north from Sta. 2285 plus 10 ft. 38 ft. at \$10.00 per ton	380.00	
(21 ft. above tunnel) from Sta. 3037 plus 31 ft. to Wet Chute 21 ft. at \$10.00 per ft.	210.00	
Drift 11 ft. above tunnel—Edge of Slope to Conklings line 12 ft. at \$10.00 per ft.	120.00	
	<hr/>	
	\$72,313.37	\$203,285.23
		72,313.37
Balance on Jan. 1, 1910		\$130,971.86

1910.

284 cars 1st class with 2100 lbs. to car equals	298.2 tons
2092 cars 2nd class with 1650 lbs. to car equals	2468.4 "
Total	2766.6 tons

2468.4 tons divided by 2.875 (ratio concentration) equals
858.57 tons cons.

858.57 tons concentrates at \$34.72 per ton	\$29,818.14
298.2 tons 1st class at \$33.76 per ton	10,067.23

Deductions.

Mining 2766.6 tons at \$4.50 per ton.....	\$12,449.70	
Milling 2468.4 tons at \$1.10 per ton.....	2,715.24	
Samp. and Tram. 1156.77 tons at \$0.421.....	487.00	
	<hr/>	
	\$15,651.94	39,876.78
		15,651.94
		<hr/>
Balance on Jan. 1, 1911.....		\$24,234.84

(Foregoing from Defendant's account.)

1913.

Excavation	4,505 c. f.
Less Waste	644 " "
Ore Cavity	<hr/> 3,861 " "

477

EXHIBIT 48.

80 cars 1st class

174 " 2nd "

To ascertain ratio

80 x 2100 divided by 2000 x 6 =	504 c. f. 1st class
174 x 1650 " " 2000 x 7.62 =	1,093.47 c. f. 2nd class
	1st class 31.56%
	2nd class 68.44%
31.56% of 3861 divided by 6 =	203.09 tons 1st class.
68.44% " 3861 " " 7.62 =	346.8 tons 2nd class.
	= 120.63 " concentrates.

Value:

203.09 tons at \$39.61.....	\$8,044.39
120.63 " " 26.67.....	3,217.20
Total	<hr/> 11,261.59

Less Costs:

Mining 549.89 tons at \$4.50	2,474.55
Milling 346.8 " " 1.10	381.48
Sampling, etc. 323.72 .421	136.28
Development	<hr/> 1,944.

4,936.31

Balance Dec. 31, 1913.....	\$6,325.28
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1914.

Volume 600 stopes.....	183,523 c. f.
" in Conklings ground.....	18,246 " "
Percentage in Conklings	9.93%

Exhibit 48 shows.....910 cars 1st class
 Deduct Raise #2..... 38 " " "

872 " " "

Deduct 90.07 of 233 cars 600 stope.....210

Bal. from Conkling ground.....662 " " "

662 x 2063 (Humes) divided by 2000 = 682.85 tons 1st class

Exhibit 48 shows.....6,729 cars 2nd class

Deduct:

Level No. 3..... 135

Raise No. 2..... 480

" No. 3..... 25

640

5,639 " " "

Deduct 90.07% of 3160 cars, 600 stopes.... 2,844

Bal. from Conkling ground..... 2,795 " " "

2795 x 1268 (Humes) divided by 2000 = 1772 tons 2nd class

478

682.85 tons at 6 c. f. = 4,007.10 c. f.

1772 " " 7.62 c. f. = 13,502.64 c. f.

17,599.74 c. f.

Excavation in Conkling..... 18,246 c. f.

Less Waste 2,606

Ore Cavity 15,640

15640 divided by 17,599.74 = 88.8%

682.85 x 88.8% = 610.81 tons 1st class.

1772. x 88.8 = 1573.53 "

= 547.31 " Concentrates

Value:

610.81 tons at \$35.42 = \$21,643.89

547.31 " " 22.28 = 12,194.06

Total \$33,837.95

Less Costs:

Mining.....2184.34 tons at \$4.50 = \$9,829.53

Milling.....1573.53 " " 1.10 = 1,630.88

Sampling, etc.....1158.12 " " .421 = 487.55

Development = 6,457. 18,404.96

Bal. Dec. 31, 1914..... \$15,432.90

1915.

Volume of 600 stopes.....	183,523 c. f.
" " Conkling portion.....	42,242 " "
Percentage in Conkling ground.....	23.01%
By summary, p. 1886.....	1,536.76 tons 1st class
In 600 stopes	15,579.51 " 2nd "
23.01% of 1,536.76.....	= 353.6 " 1st class
Add Conkling ore deducted p. 1884.....	5.24 " " "

Total 358.84 " " "

23.01% of 15,579.51..... = 3,584.84 tons 2nd class
Add fissure drift and raise No. 2, 48

cars at 1523 lb. per car..... = 36.55 " " "

3,621.39 " " "

358.84 tons at 6 c. f..... = 2,153.04 c. f.
3621.39 " " 7.62 c. f..... = 27,594.99 " "

29,748.03 " "

Conkling Excavation 42,242 " "

Less Waste 1/7..... 36,208 c. f. of ore.

36,208 divided by 29,748..... = 121.5%

358.84 X 121.5%..... = 436. tons 1st class

3621.39 X 121.5%..... = 4400. " 2nd "

= 1530.4 " concentrates.

479

Value:

436 tons at \$36.77..... = \$16,031.72

1530.4 " " 30.25..... = 46,294.00

Total \$62,326.32

Costs:

Mining 4836 tons at \$4.50 \$21,762.00

Milling 4400 " " 1.10 4,840.

Sampling, etc., 1906.4 " " .421..... 827.85

Development 2,078.

29,507.85

Bal. Dec. 31, 1915..... \$32,818.47

1916.

Excavation 16,410. c. f.

Less Waste 1/7..... 2,344.3 " "

Ore Cavity..... 14,066.7 " "

14,066.7 divided by 7.62 = 1,846.02 tons 2nd class
= 642.1 " concentrates.

Value:

642.1 tons at \$39.48 \$25,350.11

Costs:

Mining 1,846.02 tons at \$4.50 \$8,307.09

Milling 1,846.02 " " 1.10 2,030.62

Sampling, etc. 642.1 " " .421 270.32

Development 1,150.00

11,758.03

Balance March 31, 1913 \$13,592.08

Summary of Balances and Interest to March 1, 1918.

1907. Principal \$121,576.28
Interest 98,882.04
\$220,458.32

1908. Principal \$95,147.73
Interest 69,775.00
164,922.73

1909. Principal \$130,971.86
Interest 85,568.27
216,540.13

1910. Principal \$24,224.84
Interest 14,857.84
39,082.68

1913. Principal \$6,325.28
Interest 2,108.43
8,433.71

1914. Principal \$15,432.99
Interest 3,909.69
19,342.68

480

1915. Principal \$32,818.47
Interest 5,688.53
38,507.00

1916. Principal \$13,592.08
Interest 2,084.11
15,676.19

\$722,963.44

Less $\frac{1}{4}$ 180,740.86

Net Balance \$542,222.58

(Notice of Defendant's Statement of Amount Due Plaintiff on Accounting, etc.)

to the Honorable Tillman D. Johnson, Judge of the Above-named Court, and to Messrs. Pierce, Critchlow and Barrette, and W. W. Ray and William H. King, Solicitors for Complainant:

The defendant herewith serves on you calculations showing the amounts due with interest, upon the accounting in the above matter, calculated according to the opinion of the Court filed herein. In making these calculations the defendant expressly excepts to the opinion of the Court as to the principles and methods by which the amounts due are to be determined, and only files these calculations to aid the Court in ascertaining the actual amount due upon the principles and methods adopted by the Court in its decision, and for the purpose of pointing out that the amount due as calculated by the complainant is incorrect, this defendant meanwhile protesting and insisting that there is no more due upon the accounting than is shown by the account as amended in the defendant's reply brief.

DICKSON, ELLIS & LUCAS, AND
THOMAS MARIONEUX,
Solicitors for the Defendant.

Due service of a copy of the foregoing notice and statement of account admitted this 21st day of March, 1918.

PIECE, CRITCHLOW &
BARRETTE,
Solicitors for Complainant.

Endorsed: Filed in the District Court on March 21, 1918.

31 *(Defendant's Statement of Account Due Plaintiff on Accounting, etc.)*

Statement of Account Work Done in Conkling and Arthur Claims.

1902.

Leanned out Alliance Tunnel from Sta. 131 to Sta. 106 plus 13.8 ft.:		
979.5 ft. at \$1.00 per ft.....	\$2,079.50	
Interest at 8% from Jan. 1, 1903, to May 1, 1907....	720.89	
	<hr/>	
	\$2,800.39	\$1,400.19
Rescent Crosscut run from Sta. 1155 to Sta. 1156 plus 22 ft.:		
6 ft. at \$12.00 per ft.....	1,086.00	
Interest at 8% from Jan. 1, 1903, to May 1, 1907....	376.20	
	<hr/>	
	1,462.20	731.10

1903.

Crescent Drift from Sta. 166 plus 13.8		} As per brief.
ft. to Sta. 166 plus 78.8 ft. equals...	65 ft.	
Crescent Drift from Sta. 1173 plus 11.5		
ft. to Sta. 1174 plus 11.0 ft.	89 ft.	
Crescent Drift from Sta. 166 plus 78.8		
ft. to Sta. 1176 less 2.5 ft. equals...	35 ft.	
Crescent Drift from Sta. 1174 plus 110		
ft. to Sta. 577 plus 6 ft.	974 ft.	
Crosscut south of Sta. 1176.....	29.5 ft.	
Crosscut north from Sta. 1176 a.....	15.5 ft.	
Crosscut north from Sta. 653.....	17 ft.	
Total	1,225.0 ft.	

1,225.0 ft. less 75 ft. outside of Conkling ground is

1,150.0 ft. at \$15.00..... \$17,250.00

Interest at 8% from Jan. 1, 1904, to May 1, 1907.... 4,600.00

 \$21,850.00 \$10,925.00

1904.

In Arthur Claim:

Tarbet Drift from Sta. 568 plus 7 ft. to Sta. 658 plus 11 ft.

319 ft. at \$15.00 per ft. \$4,785.00

In Conkling Claim:

Crescent Drift from Sta. 605 plus 10 ft. to Sta. 660..... 200 ft.

Crescent Drift from Sta. 577 plus 6 ft. to Sta. 604 plus 25 ft. 207 ft.

482

Crosscut west from Sta. 601 plus 10 ft... 38 ft.

Crosscut from Sta. 605 (west) 23 ft.

 Total 468 ft.

468 ft. less 59 ft. outside of Conkling ground is 409 ft. at \$25.00..... 10,225.00

Crescent Drift from Sta. 604 plus 25 ft. to Sta. 605 plus 10 ft. equals 60 ft. at \$50.00 per ft. 3,000.00

Crosscut south from Sta. 601 equals 56 ft. at \$15.00 per ft. 840.00

 Total expenditures..... \$18,850.00

Interest at 8% from Jan. 1, 1905, to May 1, 1907.... 3,518.06

 \$22,368.06 \$11,184.33

1905.

In Conkling Claim:

Crescent Drift from Sta. 660 to Sta. 664..	185 ft.		
Crescent southwest from Sta. 664.....	65 ft.		
	<hr/>		
	250 ft.		
250 ft. at \$25.00 per ft.....		\$6,250.00	
Interest at 8% from Jan. 1, 1906, to May 1, 1907....		606.67	
		<hr/>	
		6,916.67	3,458.33
McKay Crosscut from Sta. 660 to Sta. 660 plus 130 ft. equals 130 ft. at \$12.00 per ft.....		\$1,560.00	
Interest at 8% from Jan. 1, 1906, to May 1, 1907....		166.40	
		<hr/>	
			1,726.40

1906.

In Conkling Claim:

McKay Crosscut from Sta. 660 plus 130 ft. to Sta. 667 plus 40.5 ft.....	284 ft.		
K. K. Drift from Sta. 1856 plus 2 ft. to Sta. 1857 plus 2 ft.....	42 ft.		
	<hr/>		
	326 ft.		
326 ft. at \$12.00 per ft.....		\$3,912.00	
Interest at 8% from Jan. 1, 1907, to May 1, 1907....		104.32	
		<hr/>	
			\$4,016.32

1907.

In Conkling Claim work prior to May 1:

Drift from McKay Crosscut from Sta. 1855 plus 2 ft. to face 140 ft. at \$12.00 per ft.....		\$1,680.00	
Interest at 8% from Jan. 1, 1907, to May 1, 1907....		44.80	
		<hr/>	
			\$1,724.80
Balance on May 1, 1907.....			<hr/>
			\$35,166.47

483

1907.

After May 1.

Shipped K. K. ore—(559.15 tons 1st class ore) 252.06 tons concentrates).....		\$31,918.87	
258.91 tons slimes at \$3.81.....		986.44	

Cavity mined during year 1907 equals 50,000 cu. ft.
 50,000 cu. ft. less 659.15 tons crude K. K. ore x 6
 gives numbers cu. ft. to ton 1st class ore..... 3,995 cu. ft.
 50,000 cu. ft. less 252.06 tons concentrates x 2,875
 (ratio tons into 1) x 7.62 cu. ft. to ton..... 5,522 cu. ft.

Total cu. ft. of ore to be deducted..... 9,477 cu. ft.

50,000 cu. ft. cavity minus 9,477 cu. ft. equals 40,523 cu. ft. of ore.
 40,523 cu. ft.— $\frac{1}{2}$ 1st class ore and $\frac{1}{2}$ 2nd class ore—equals
 2,975.25 tons 1st class and 2,975.25 2nd class.

2,975.25 tons 1st class ore at \$38.51..... 114,576.87

2,975.25 tons 2nd class ore divided by 2.875 (ratio tons into 1)
 equals 1,034.87 tons concentrates.

1,034.87 tons at \$44.64 per ton..... 46,196.00

Deductions.

Mining 7,334.34 tons at \$4.50 per ton..... \$33,004.48

Milling 3,099.93 tons at \$1.10 per ton..... 4,060.92

Samp. and Tram. 5,145.31 tons at \$0.421..... 2,166.18

Total \$39,240.58

Development work done year- 1902, 1903, 1904
 brought forward to May 1, 1907..... 35,796.47

McKay Crosscut from Sta. 667 plus 40.5 ft. to Sta.
 1994 plus 10 ft., 94 ft. at \$15.00 per ft..... 1,365.00

K. K. Drift from Sta. 367 W. to face 33 ft. at \$12.00
 per ft..... 396.00

K. K. Drift from Sta. 1878 to Sta. 1879 plus 10 ft. a
 40 ft. at \$12.00 per ft..... 480.00

Drift from K. K. Raise to face 435 ft. @ \$10.00.... 435.00

K. K. Raise (3 comp.) 50 ft. at \$25.00 per ft..... 1,475.00

Chute opposite Sta. 360 in K. K. Drift 15 ft. at \$10.00
 per ft..... 150.00

\$78,708.05 \$193,678.78

78,708.05

Balance Jan. 1, 1918..... \$114,970.73

Interest to Mar. 23, 1918, inclusive, at 8% for 10 years and
 82 days..... 94,042.90

\$209,013.63

1908.

Total cavity equals 37,120 cu. ft.

Ratio—2 tons 2nd class ore to 1 ton 1st class ore.

Using 6 cu. ft. to ton 1st class ore and 7.62 cu. ft. to ton 2nd class ore.

1st class ore equals 3,747.64 tons.

484 2nd class ore equals 3,495.28 tons.

1,215.74 tons ore, at \$37.93 per ton.....	\$46,113.02
1,747.64 tons 1st class ore at \$46.42.....	81,125.45
223.98 tons, slimes at \$2.67 per ton.....	598.03

Deductions.

5,242.92 tons mined at \$4.50 per ton.....	\$23,593.14
3,495.28 tons milled at \$5.10 per ton.....	3,844.81
3,187.36 tons Samp. and Tram. at \$0.421.....	1,341.88

At mouth of Drill Hole Drift:

14 ft. at \$25.00 per ft. equals \$3.50 $\frac{1}{2}$ to Silver King Coalition equals	175.00
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McKay Crosscut from Sta. 1904 plus 10 ft. to Sta. 2010 plus 22 ft.

96 ft. at \$15.00 per ft.....	1,440.00
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Drift under Elephant Stope from Sta. 2010 plus 2 ft. to Sta. 3039 plus 10 ft. (less Joint Survey Stope.)

10 ft. at \$12.00 per ft.....	1,200.00
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Drift west from Sta. 3037 plus 35 ft. to face.

10 ft. at \$12.00 per ft.....	120.00
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Switch and Powder Magazine, along McKay crosscut near Sta. 1855.

61 ft. at \$10.00 per ft.....	610.00
-------------------------------	--------

Wet Chute at Sta. 3038 plus 10 ft. (2 comp.)

15 ft. at \$18.00 per ft.....	270.00
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32,714.83 \$127,836.50

32,714.50

Balance Jan. 1, 1909..... 95,121.67

Interest to Mar. 23, 1918, inclusive, 9 years and 82 days at 8%... 70,197.14

\$165,318.81

1900.

Cavity for year 1900 equals 104,205 cu. ft.

Cavity for year 1910 equals 29,355 cu. ft.

 Total 133,550 cu. ft.

1/7 of total cavity (133,550 cu. ft.) equals waste (19,062.9 cu. ft.).

Total cavity (133,550 cu. ft.) less waste (19,062.9 cu. ft.) equals 114,557.1 cu. ft. ore in cavity.

Cars according to Shift-Boss Records:

1900.....	1st class	884—2nd class	8,962
1910.....	1st class	284—2nd class	2,962
Totals			<hr/> 1,168 <hr/> 11,944

1,168 cars 1st class with 2,100 lbs. to car equals
1,236.4 tons for 1900 and 1910.

11,944 cars 2nd class with 1,650 lbs. to car equals
9,553.8 tons for 1900 and 1910.

1,236.4 tons 1st class at 6 cu. ft. per ton equals... 7,358.4 cu. ft.
495

9,553.8 tons 2nd class at 7.62 cu. ft. to ton equals... 75,086.0 cu. ft.

Total cu. ft. accounted for by cars for 1900
and 1910..... 82,444.4 cu. ft.

114,557.1 cu. ft. minus 82,444.4 cu. ft. equals
32,112.7 cu. ft. of ore remaining in cavity.

Percentage 1st class as of total number cars
removed equals 8.91%.

Percentage 2nd class as of total numbers cars
removed equals 91.09%.

32,112.7 cu. ft. at 91.09% equals 29,231.5 cu. ft.
2nd class.

2,801.2 cu. ft. divided by 6 cu. ft. per ton equals
476.87 tons 1st class (cavity).

3,838.78 cu. ft. divided by 2.875 (ratio concentra-
tion) equals 1,335.22 tons concs.

2000.

1st class accounted for by cars.....	928.2 tons
1st class accounted for by cavity...	476.87 tons

Total 1st class..... 1,405.07 tons

1,405.7 tons 1st class at \$40.79 per ton..... \$57,312.80

8,962 cars 2nd class equals 7,385.4 tons.

7,385.4 tons divided by 2,875 (ratio concentration)
equals 2,568.83 tons
Tons accounted for by cavity (cons.) 1,335.22 tons

Total cons. 3,904.05 tons

3,904.05 tons cons. at \$37.30 per ton..... \$145,972.49

1900 cont.

Brought forward from preceding page..... \$293,285.23

Deductions.

Mining 12,629.25 tons at \$4.50 per ton.....	\$56,831.63	
Milling 1,124.18 tons at \$1.10 per ton.....	12,346.00	
Ramp. and Tram. 5,300.12 tons at \$0.421.....	2,235.14	
Drift north from Sta. 2347 to face 19 ft. at \$10.00 per ft.	190.00	
Drift north from Sta. 2285 plus 19 ft. 38 ft. at \$10.00 per ton	380.00	
(21 ft. above tunnel) from Sta. 3037 plus 31 ft. to Wet Chute 21 ft. at \$10.00 per ft.....	210.00	
Drift 11 ft. above tunnel—Edge of Slope to Conklings line 12 ft. at \$10.00 per ft.....	120.00	
	<hr/>	
	\$72,813.37	\$293,285.23
		72,813.37

Balance on Jan. 1, 1910..... \$130,971.40

Interest to Mar. 23, 1918 at 8%—8 yrs. 82 days..... 90,175.91

\$217,147.70

426

1910.

284 cars 1st class with 2,160 lbs. to car equals..... 298.2 tons
2,963 cars 2nd class with 1,650 lbs. to car equals.... 2,498.4 tons

Total 2,796.6 tons

2,468.4 tons divided by 2.875 (ratio concentration)
equals 858.57 tons concs.

858.57 tons concentration at \$34.72 per ton.....	\$29,818.14
286.2 tons 1st class at \$33.76 per ton.....	\$9,667.23

Deductions.

Mining 2,766.6 tons at \$4.50 per ton.....	\$12,449.70	
Milling 2,468.4 tons at \$1.10 per ton.....	2,715.24	
Stamp. and Tram. 1,136.77 tons at \$0.421.....	487.00	
	<hr/>	
	\$15,651.94	\$39,876.78
		<hr/>
		15,651.94

Bal. on Jan. 1, 1911.....	\$34,224.84
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Interest to Mar. 23, 1913—7 yrs. 92 days at 9%.....	14,005.29
	<hr/>
	\$48,230.13

1913.

Total cavity 4,565 cu. ft.

1/7th total cavity (4,565 cu. ft.) equals 643.5 cu. ft. (waste).

4,565 cu. ft. minus 643.5 cu. ft. equals 3,921.5 cu. ft. ore in cavity.

80 cars 1st class—174 cars 2nd class ore.

Percentage 1st class as of total number cars removed 31.5%.

Percentage 2nd class as of total number cars removed 68.5%.

3,921.5 cu. ft. at 31.5% equals 1,236.37 cu. ft. 1st class.

1,236.37 cu. ft. divided by 6 cu. ft. per ton equals 206.73 tons 1st class ore.

206.73 at \$30.22 per ton (\$39.61—less \$0.39 copper)	\$7,981.67
--	------------

3,921.5 cu. ft. at 68.5% equals 2,645.13 cu. ft. 2nd class ore.

2,645.13 cu. ft. divided by 7.62 cu. ft. per ton equals 347.13 tons 2nd class ore.

347.13 tons divided by 2.875 (ratio concentration) equals 120.74 tons concs.

120.74 tons at \$26.51 per ton (26.67 less \$0.16 copper)	3,200.82
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Deductions.

Mining 549.96 tons at \$4.50 per ton.....	\$2,474.37	
Milling 347.13 tons at \$1.10 per ton.....	381.84	
Stamp. and Tram. 323.47 tons at \$0.421.....	136.18	
Trude Drift from Sta. 4462 plus 6 ft. to Sta. 3162 c plus 10 ft. 52 ft. at \$12.00 per ft.....	624.00	
497		
Engine Drift east from Columbus Haine and Sta. 2612 c southwest to connection with old drift 110 ft. at \$12.00 per ft.....	1,320.00	
	<hr/> \$4,903.39	\$11,181.89
		4,906.20
Balance on Jan. 1, 1914.....		<hr/> \$6,215.50
Interest to Mar. 23, 1918 at 6% for 4 yrs. 82 days.....		2,100.64
		<hr/> \$8,316.15

1914.

600 cars 1st class ore with 2,000 lbs. per car equals
618.9 tons.

1,423 cars 2nd class ore with 1,306 lbs. per car
equals 902.18 tons.

902.18 tons 2nd class divided by 2.875 (ratio con-
centration) equals 313.80 tons concs.

313.80 tons concs. at \$22.10 per ton (\$72.24 less
\$9.18 copper)..... | \$6,934.08 |

618.9 tons 1st class at \$30.72 per ton (\$185.42 less
\$1.70 copper)

20,909.31

Deductions.

Mining 1,321.08 tons at \$4.50 per ton.....	\$5,944.86
Milling 902.18 tons at \$1.10 per ton.....	992.40
Stamp. and Tram. 932.7 tons at \$0.421.....	392.66
Custer Drift from Sta. 2612-w plus 7 ft. to Sta. 2612-g plus 15 ft.	
130 ft. at \$12.00 per ft.....	1,560.00
Crosscut north and south from Custer Drift.	
96 ft. at \$12.00 per ft.....	1,152.00

Drift C from Sta. 2581-c plus 14.5 ft. to Sta. 2581-d plus 54 ft.

68 ft. at \$12.00 per ft..... 816.00

Crosscut north from C drift at Sta. 2581-c minus 7 ft. from side of drift to face.

34 ft. at \$12.00 per ft..... 408.00

600 level from Sta. 3908 plus 48 ft. to Sta. 3910 plus 28 ft.

102 ft. at \$15.00 per ft..... 1,530.00

Raise from 600 ft. level to McKay Drift (3 comp.)

15 ft. at \$25.00 per ft..... 375.00

Station on McKay Drift at top of described raise

58 ft. at \$10.00 per ft..... 580.00

\$14,686.92	\$27,804.29
	14,686.92

Balance on Jan. 1, 1915.....	13,117.37
Interest to Mar. 23, 1918 at 8%—3 yrs. 82 days.....	3,383.92

\$16,501.29

488

1915.

308 cars 1st class ore with 2098 lbs. per car equals 323.09 tons.

8,348 cars 2nd class ore with 1523 lbs. per car equals 6,357.0 tons.

6,357.0 tons 2nd class ore divided by 2.875 (ratio concentration) equals 2,211.13 tons cons.

2,211.13 tons cons. at \$30.07 per ton (\$30.25 less \$0.18 copper).....

\$66,488.68

323.09 tons 1st class ore at \$34.67 per ton (\$36.77 less \$2.10 copper).....

\$11,201.53

Deductions.

Mining 6,680.09 tons at \$4.50 per ton..... \$30,060.41

Milling 6357.0 tons at \$1.10 per ton..... 6,992.70

Samp. and Tram. 2534.22 tons at \$0.421..... 1,066.91

Development within Conkling 700 ft. level sta. 4276 plus 41 ft. to face (less 700 stope).

39 ft. at \$12.00 per ft..... 468.00

Raise from 600 level to 600 top stope at sta.
3309½ (3 comp.).

52 ft. at \$25.00 per ft..... 1,300.00

Chute from 600 level to 600 Middle Stope at Sta.
3190 minus 7 ft. (1 comp.).

16 ft. at \$10.00 per ft..... 160.00

Chute from 600 level to 600 Middle stope at Sta.
3910-a (1 comp.).

15 ft. at \$10.00 per ft..... 150.00

40,198.02 \$77,690.21
40,198.02

Balance on Jan. 1, 1916.....

\$37,492.19

Interest to Mar. 23, 1918—2 yrs. 82 days at 8%.....

6,672.54

\$44,164.73

1916.

No first class ore.

914.15 cars 2nd class ore with 1,418 lbs. per car
equals 648.13 tons.

648.13 tons 2nd class ore divided by 2.875 (ratio
concentration) equals 225.43 tons concentrates.

225.43 tons cons. at \$39.39 per ton (\$39.48 minus
\$0.09 copper).....

\$8,879.69

Deductions.

Mining 648.13 tons at \$4.50 per ton..... \$2,916.33

Milling 648.13 tons at \$1.10 per ton..... 712.94

Samp. & Tram. 225.43 tons at \$0.421..... 94.91

489

Engine Drift from Sta. 2612-s to Sta. 2612-u plus
21 st.

115 ft. at \$10.00 per ft..... \$1,150.00

\$4,874.44 8,879.69
4,874.44

Balance Jan. 1, 1917.....

\$4,005.25

Interest to Mar. 23, 1918 at 8%—1 yr. 82 days.....

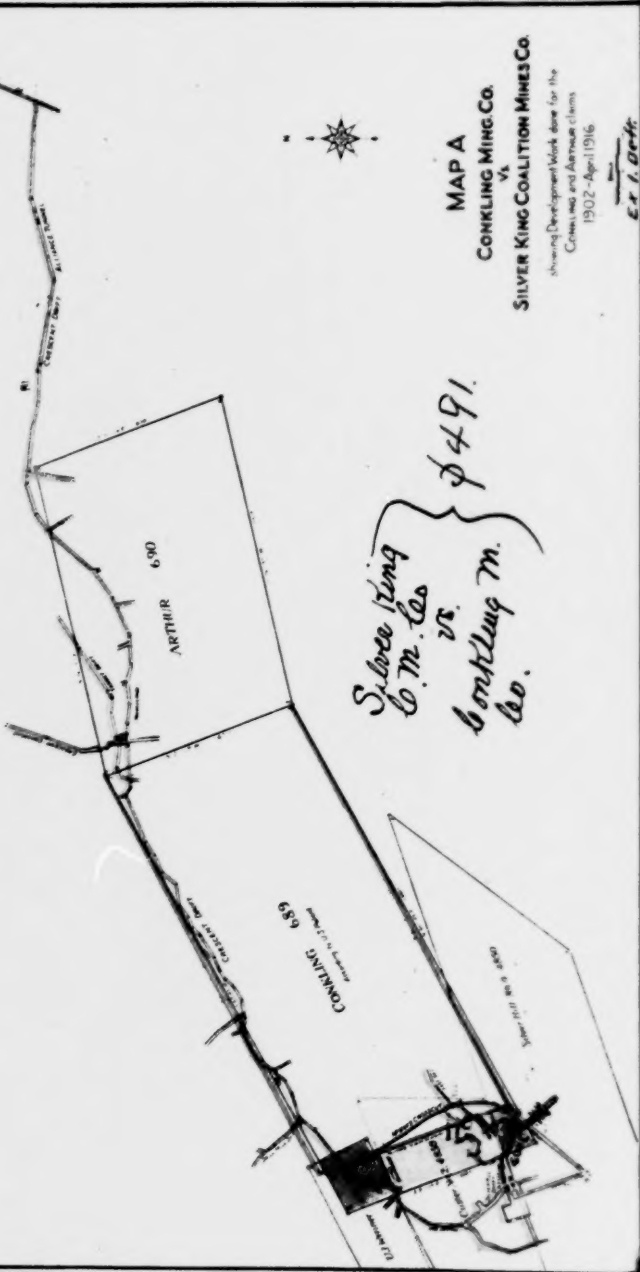
392.40

\$4,397.65

Summary.

Year.	Principal.	Interest.	Totals.
1907	\$114,970.73	\$94,042.90	\$209,013.63
1908	95,121.67	70,197.14	165,318.81
1909	130,971.86	86,175.91	217,147.77
1910	24,224.84	14,001.29	38,226.13
1913	6,215.50	2,100.64	8,316.15
1914	13,117.37	3,383.92	16,501.29
1915	37,492.19	6,672.54	44,164.73
1916	4,005.25	392.40	4,397.65
	<hr/>	<hr/>	<hr/>
	\$426,119.41	\$276,966.74	\$703,086.15
Less Silver King Coalition $\frac{1}{4}$ Interest.....			175,771.54
			<hr/>
			\$527,314.61

490 (Here follow diagrams marked pp. 491 to 514, incl.)



*Silver King
Co. M. Co.
vs.
Conkling M.
Co.*

\$491.

ex l. 10th

CONKLING MING CO.
 Vs
 SILVER KING COALITION MINES CO.
 SECTION NO. 0 - SECTION NO. 15

CONSTRUCTED ON VERTICAL PLANES

RUNNING N. 21° 09' W. AND S. 21° 09' E. ...

LOOKING EASTERLY.

DISTANCE BETWEEN PLANES 8 FT.



Copyright by
 Conkling Ming Co.
 1914



Silver King
C. M. Leo.

b. m. leo.

15.
Conkling M.
Co.



496



Source: *State of Georgia*, 1990, p. 10.

Section No. 0

1994

1999

Silver King
C. M. Leo
Com King M.
Leo

497



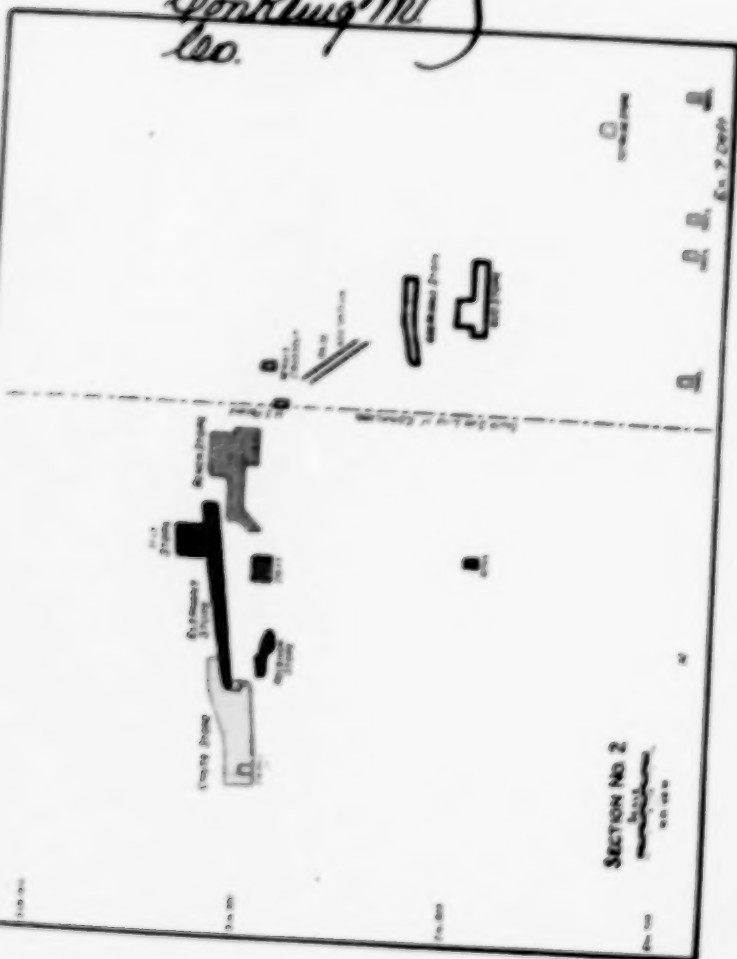
Section No. 1



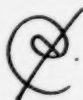


Silver King
to M. Leo.
to
Leon King M.
Leo.

498



Silver King
 Co. M. Co.
 vs.
 Conkling M.
 Co.



499

E. B. Deaf



with Side Line of CONKLING

SECTION NO. 3



Line 100

Line 200

Line 300







Q.

2012-2013

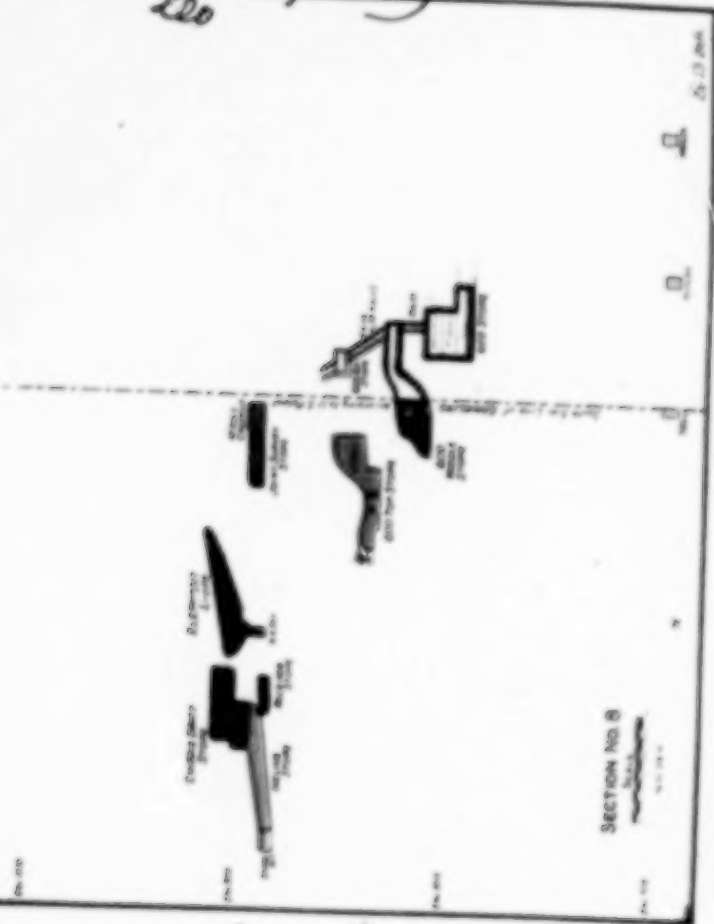




Silver King
 Lemco.
 Bonding M.
 Leo



504



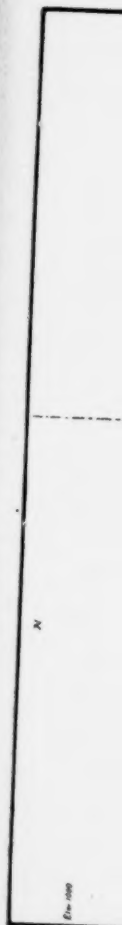
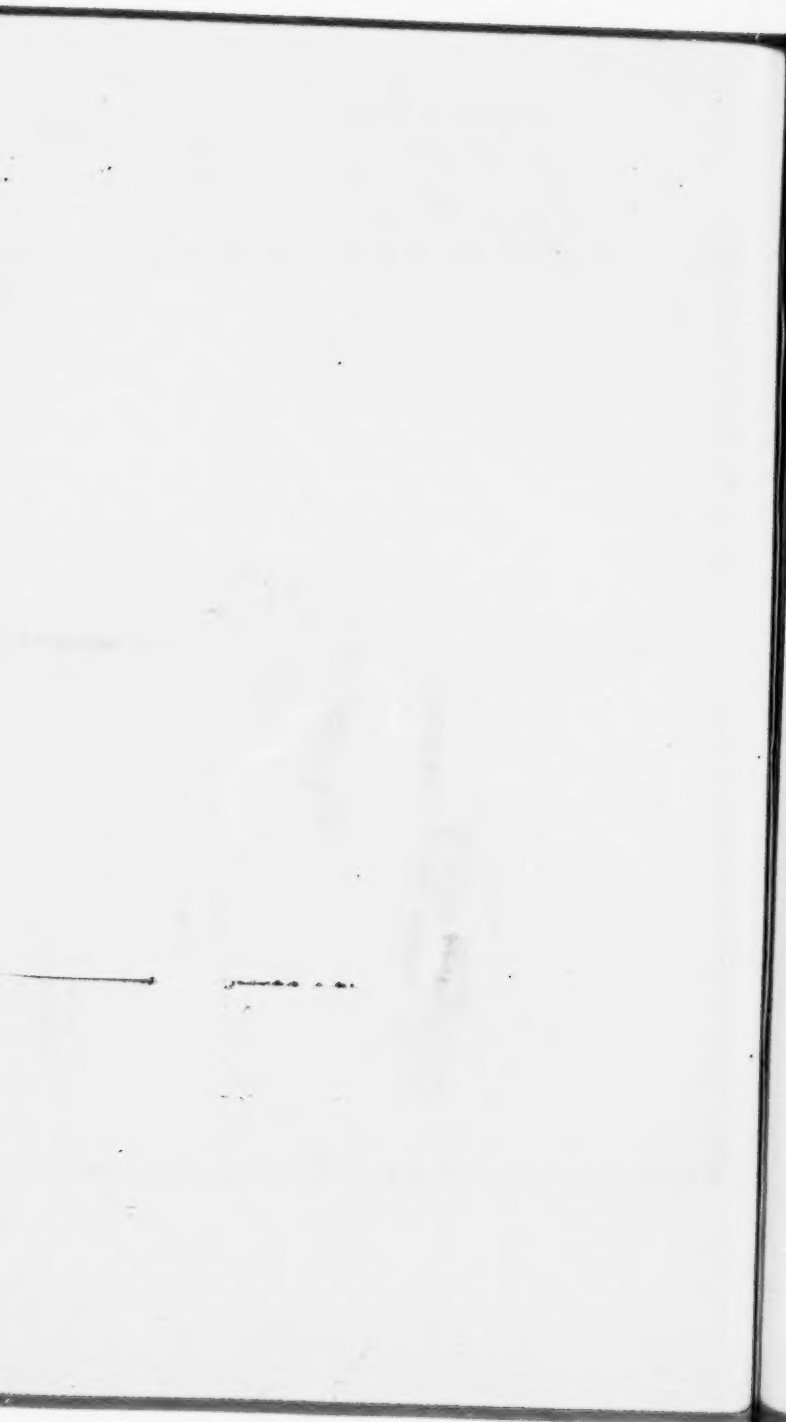


Silver King
 Co. M. Co.
 Logging M.
 Co.

Φ

505

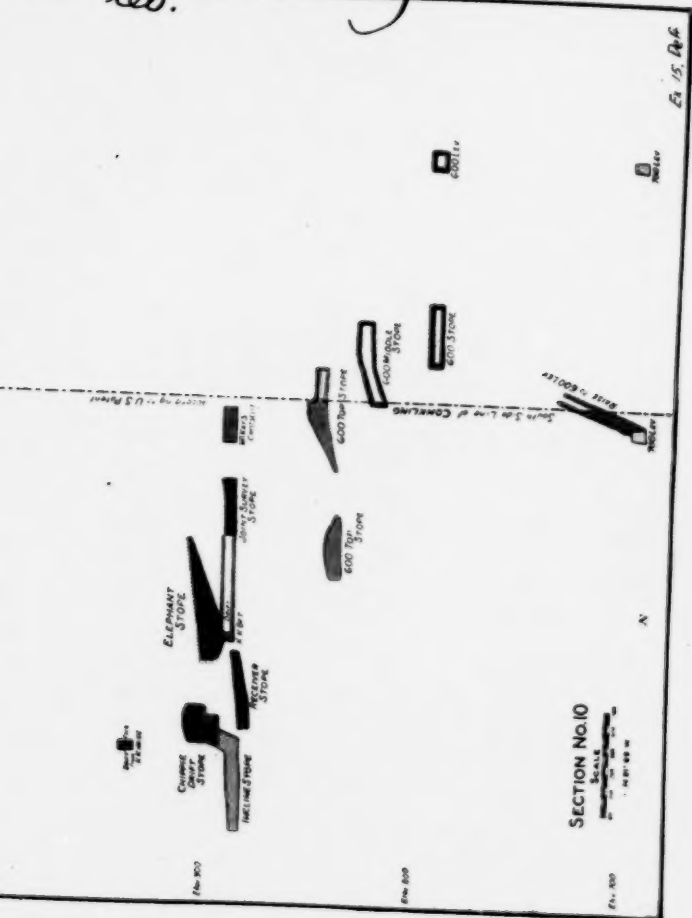




Silver King
L.M.Co. }
Conkling M.
Co. }

506

Ex 15. A.6



Q

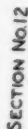
Fr. W. A. A. A.





Q

24 17. April





Silver King
 6 m. l. o.
 vs
 Spunking m.
 l. o.



509

Ex 18 Def



N

SECTION NO. 13



600 Ton Stone



600 Ton Stone

of Corraling according to U.S. Survey



ELEPHANT
 HEAD STONE



HEAD STONE



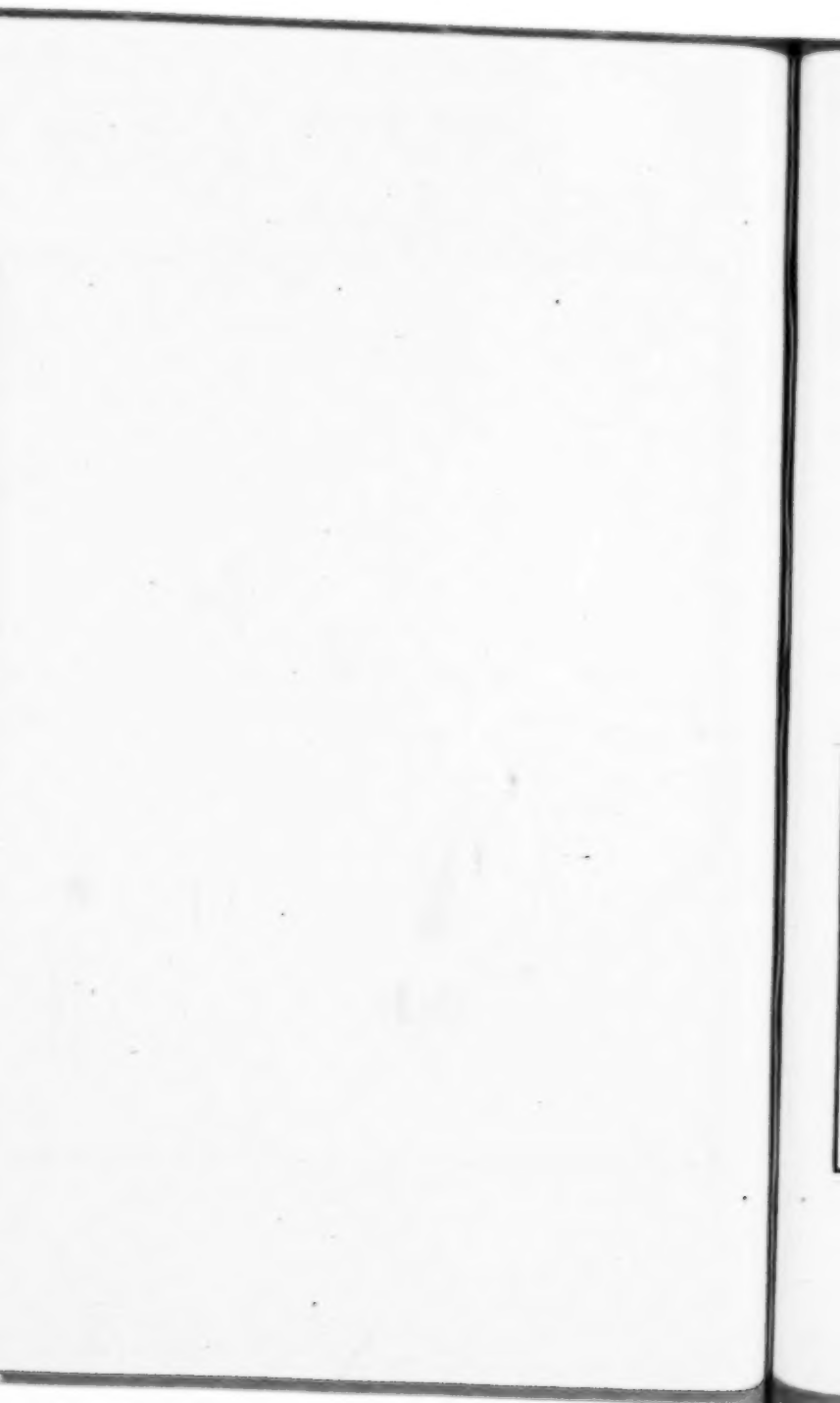
HEAD STONE

221-19-25

Ex. 20

Ex. 21

Ex. 22

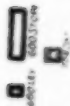


Silver King
 to M. Lee.
 vs.
 Conking M.
 Lee.



510

Exp. 2nd



Line from King of Conking according to U.S. Map



SECTION No 14



Exp. 1st

Exp. 2nd

Exp. 3rd

Exp. 4th

Silver King
 Co. M. Leo.
 vs.
 Conkle M.
 Leo.

511

Q

Ex. 100. 100



SECTION No. 15



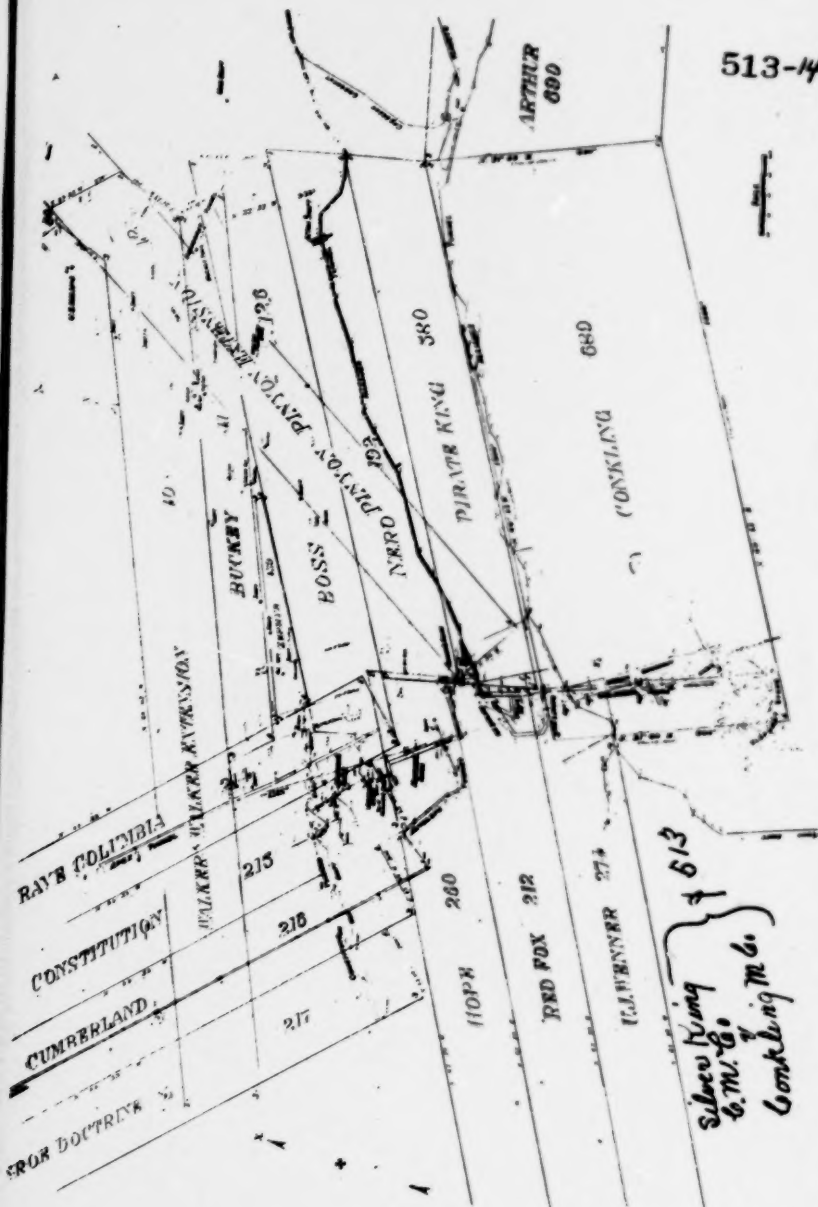
Silver King L.M. Co. } \$5/2

15 } 7 1/2.
 Conkling Mining Co.



513-14

EX 45, 1938



515

EXHIBIT 46.

Salt Lake City, Utah.

November 30, 1908.

To the Silver King Coalition Mines Company,
a Corporation Under the Laws of the State
of Nevada, Salt Lake City, Utah:

You are hereby notified that on the 17th day of September, 1908, you and the Conkling Mining Company, a corporation under the laws of the State of Utah, with its principal place of business in Salt Lake City, said State, were, ever since have been and now are, the owners in fee as tenants in common, and entitled to the joint possession, use, and occupation, and the issues, rents and profits of the same, of the Conkling lode mining claim, patented as U. S. lot No. 689, and the Arthur lode mining claim, patented as U. S. lot No. 690, and situated in the Uintah Mining District Summit County, State of Utah; you, said Silver King Coalition Mines Company, being the owner of an undivided one-fourth, and said Conkling Mining Company being the owner of the other undivided three-fourths of said Conkling and Arthur lode mining claim; and also that on or about the 29th day of May, 1907, you and Nicholas Treweek and J. Leonard Burch, were the owners in fee as tenants in common of the said Conkling and Arthur mining claims and entitled to the joint possession, use and occupation and to the issues, rents and profits of the same in the proportions aforesaid, and continued to be such owners until the 17th day of September, 1908, at which time said Nicholas Treweek and wife, and said J. Leonard Burch and wife, sold and conveyed all their right, title and interest in and to said undivided three-fourths of said Conkling Mining Company, and also on that date, said Nicholas Treweek and said J. Leonard Burch, did sell, assign and transfer to said Conkling Mining Company, all manner of action, and causes of action, suits, dues, demands, controversies and accounts of every kind and nature whatsoever in their favor and against you, said Silver King Coalition Mines Company. And that you, said Silver King Coalition Mines Company, by secret underground works, used and controlled exclusively by you, and not accessible to or in any way under the control or use of the said Conkling Mining Company or said Nicholas Treweek, or said J. Leonard Burch, without their knowledge or consent, or that of either of them, did on or about the 29th day of May, 1907, enter underneath, the surface of said mining claims, and did commence mining, removing and disposing of the valuable ores
516 from underneath the surface of said Conkling Mining claims, and ever since that date, you have continuously so mined, removed and disposed of large and valuable quantities of said ores contained between planes drawn down perpendicularly through the exterior boundary lines of said Conkling mining claim, to wit, about 20,000 tons of all grades and of the gross value of about \$800,000.00.

in place in the mine, or of the average value of about \$25.00 per ton, after paying all costs of mining and disposing of the same. And further, you will forthwith make out and deliver to said Conkling Mining Company a detailed statement or an itemized account showing when you commenced such mining, the number of tons of such ores so mined and disposed of by you, and the just and necessary costs and expenses of mining and disposing of the same, and the amounts of money you have received from the sales of such ores, from the commencement of such mining and sales by you to the date of this demand, and you are also requested and demanded to keep all of the ores that you may hereafter mine from said Conkling and Arthur mining claims, separate from all other ores, and a separate account of all sales that you may make of such ores, and the cost of mining, removing and selling, and the amount of money received from such sales.

And said Conkling Mining Company further demands of you, said Silver King Coalition Mines Company, that you forthwith pay to it, said Conkling Mining Company, three-fourths of all sums of money that you, said Silver King Coalition Mines Company, have received from all of the ores that you have mined and sold from underneath the surface of said Conkling mining claims as aforesaid, less the reasonable costs of mining and selling the same.

And said Conkling Mining Company further demands of you, said Silver King Coalition Mines Company, that you let said Conkling Mining Company into the immediate, joint possession with you, of said mining claims, and of said underground works, within and underneath the surface of said mining claims, and join you in the further mining and disposing of the ores now in sight, or that may hereafter be found or developed in said mining claims or either of them, upon a fair and equitable basis, as the equity in the premises makes and provides.

Said Conkling mining claim as patented, is bounded and described as follows, with magnetic variation seventeen degrees and twenty minutes east:

Beginning at corner No. 1, a pine post four inches square marked U. S. 689, P. 1.

517 Thence first course north twenty-one degrees, and nine minutes west three hundred feet to discovery point six hundred feet to Corner No. 2, a pine post four inches square marked U. S. 689, P. 2. being also corner No. 4 of Lot No. 191, the Lincoln lode claim, and Corner No. 2 of Lot No. 580, the Pirate King lode claim, from which U. S. Mineral Monument No. 4 bears north thirty-two degrees and fifty-two minutes west nine hundred and thirty-nine and three-tenths feet distant, and a pine tree four inches in diameter marked U. S. 689, P. 2 B. T., bears north thirteen degrees west twenty-eight feet distant.

Thence second course, south sixty degrees and forty-five minutes west one thousand five hundred feet to corner No. 3.

Thence third course, south twenty-one degrees and nine minutes east six hundred feet to corner No. 4.

Thence fourth course, north sixty degrees and forty-five minutes east one thousand five hundred feet to corner No. 1, the place of beginning; said lot No. 689 extending one thousand five hundred feet in length along said Conkling vein or lode, and containing twenty acres and forty-five hundredths of an acre of land more or less.

Very respectfully yours,

CONKLING MINING COMPANY,
By NICHOLAS TREWEEK,
President."

678

Exhibit 48
FINAL SUMMARY SUBJECT TO ELIMINATION OF ORE NOT FROM CONKLING GROUND
LOCATION

	1913		1914		1915		1916	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd
	Waste	Waste	Waste	Waste	Waste	Waste	Waste	Waste
Elephant Stope.....	\$ (50)	\$ (61)	42	285	86			
do supposed Toole Stope								
(doubtful).....	30	113	57					
Retimbering Elephant Stope—								
near Raise No. 1.....			39	235				
Retimbering old Elephant Stope.....				37				
Receiver Ore Drift.....			61	125	43			
Receiver Stope.....			479	798	415			
Receiver No. 2 (Joint Survey).....				67				
Columbia Raise.....			18	142	1964			
Columbia Raise, Level No. 1.....				221	1442			
Columbia Raise, Level No. 2.....			39	511	2175			
Columbia Raise, Level No. 3,								
(Outside Conkling ground								
Columbia Raise No. 3 Drift.....			135	272	648			
Between Receiver & Raise No. 1—								
(doubtful), retimbering old drift								
of Elephant Stope—partly in and								
partly out of Conkling ground.								
Raise No. 1—just out of Conkling ground			6	110				
Raise No. 2—outside of Conkling ground				537				
Raise No. 3—outside of Conkling ground			38	480	187			
Custer Drift.....				25				
Custer No. 1 Drift.....					198			

CONKLING MINING COMPANY.

Flume Drift (500 level) top of Raise from 600 to 500.....	4	14	163
500 Level (McDonald states is No. 1 Ore Chute and result of cleaning out bins—probably included in previous figures and not in Conkling Ground.....	1	47	
Raise No. 2, Station 3916 A (not in Conkling ground but included here because taken by Anderson.....	34		
704 Stope (doubtful).....	247		
600 Stopes (doubtful)—see other summary for differences in counts and for other descriptions.....	233	3160	2820
	716	19244	281
Total.....	30	113	57
	(80)	(174)	(81)

2335 281

721 10586 543

910 6279 11160

30 113 57
(80) (174) (81)(\$Subsequently added, see
Schoelfield)

	1st Class	2nd Class	Waste
1913	30	113	57
1914	910	6279	11160
1915	721	19586	543
1916		2335	281
	1061	28313	12050
	(1711)	(38374)	(12074)

(Exhibit '68.)
 Extract of Ore Sales from the Silver King Coalition Mines Company during
 the period May, 11, 1907, to March 31, 1910.

679	Crude Ore Net Weight	Net Proceeds Crude	Average Price Per Ton	Concen- trates Tons	Net Proceeds Concentrates	Average Price per Ton	Slimes Tons	Net Proceeds Slimes	Average Price Per Ton	Total Net Proceeds.
1907										
May	531.71	17,862.72	33.37	149.75	5,804.45	38.76				23,667.17
June	1,040.12	75,672.44	38.65	614.15	29,077.55	45.69				104,749.99
July	1,303.10	60,763.07	46.63	622.55	38,577.88	61.97	343.21	932.96	2.72	100,273.93
August	1,928.45	85,174.03	44.17	949.58	50,066.86	52.76	231.65	1,541.06	6.65	136,811.65
September	2,078.05	90,727.03	43.66	653.22	30,331.21	45.56	307.11	1,538.55	7.52	122,617.39
October	2,198.54	80,964.77	36.82	975.30	36,009.04	36.90	345.91	909.79	3.79	120,783.60
November	1,821.32	52,316.58	29.27	776.75	31,790.64	40.83	359.33	848.60	3.27	83,033.82
December	1,670.36	42,778.41	25.61	760.31	22,354.53	29.40	234.54	71.92	.30	65,304.86
	13,171.67	597,259.65	38.51	5,531.61	346,041.86	44.64	1,521.75	5,862.90	3.85	760,064.41
1908.										
January	656.73	27,947.74	42.55	533.22	14,759.32	27.68	96.65	24.15	.25	42,731.21
February	547.82	23,777.24	43.40	390.60	7,399.95	20.52				31,177.19
March	733.89	35,460.53	48.23	282.75	8,120.50	28.72	113.85	39.20	.52	43,590.23
April	892.36	44,898.30	50.21	274.87	10,063.83	36.68	134.59	696.55	5.19	53,590.77
May	957.89	47,101.84	49.19	491.15	18,310.87	37.06	100.32	623.00	6.21	55,935.71
June	1,400.65	74,791.24	53.39	514.61	30,063.20	40.15	104.71	964.37	9.31	96,418.81
July	2,031.72	97,147.78	47.81	611.53	27,246.64	44.55	145.10	561.89	4.01	124,970.31
August	1,913.79	93,535.75	48.87	614.79	27,064.07	44.05	160.77	522.53	3.28	121,142.55
September	1,714.90	82,080.20	47.83	749.39	30,553.89	40.77		9.33	.06	112,695.42
October	2,254.94	97,643.65	43.30	728.83	28,064.75	38.53				125,708.40
November	2,003.06	86,544.96	44.35	680.90	28,186.27	41.39				117,031.23

CONKLING MINING COMPANY.

December	2,650.78	113,130.43	42.64	703.58	27,950.18	30.73	141,080.63
1909							
January	1,040.36	65,206.47	43.76	669.36	28,167.60	40.85	113,456.07
February	2,268.13	85,004.85	37.50	781.06	25,901.91	34.03	110,968.76
March	1,806.50	87,326.14	48.28	897.93	30,154.34	33.58	117,400.48
April	1,808.96	82,349.68	44.06	799.11	30,789.65	38.53	113,139.53
May	1,908.80	86,812.34	45.43	755.22	27,556.62	36.49	114,309.46
June	1,541.64	69,337.42	44.97	827.38	30,404.81	34.75	99,742.23
July	1,815.96	73,938.34	41.80	626.56	24,309.78	38.80	100,346.12
August	1,908.77	74,832.12	39.30	644.05	21,969.83	33.53	96,432.92
September	1,855.32	83,939.87	45.24	605.77	23,237.22	38.39	107,197.09
October	2,054.43	81,663.68	39.75	655.91	27,976.76	42.65	100,640.44
November	1,870.74	63,832.47	34.12	673.55	25,008.91	44.63	89,431.38
December	2,320.74	72,491.89	31.24	1,103.16	33,456.13	34.86	110,947.72
	23,261.25	946,868.67	40.79	8,838.86	324,163.53	37.39	1,283,032.20
1910.							
January	1,310.17	46,168.61	36.77	662.12	36,934.37	38.91	76,122.96
February	1,547.28	38,690.00	31.02	799.87	27,960.31	34.07	66,650.91
March	1,214.43	38,173.97	31.44	805.69	29,198.64	36.21	67,374.61
April	1,067.06	36,460.10	34.16	731.03	25,058.59	33.36	61,608.69
May	776.28	28,356.29	36.40	663.29	18,694.70	33.01	46,850.96
June	669.78	20,067.34	33.45	500.40	15,074.97	30.12	35,142.21
	6,214.90	209,828.81	33.76	4,112.10	142,821.56	34.73	302,650.29

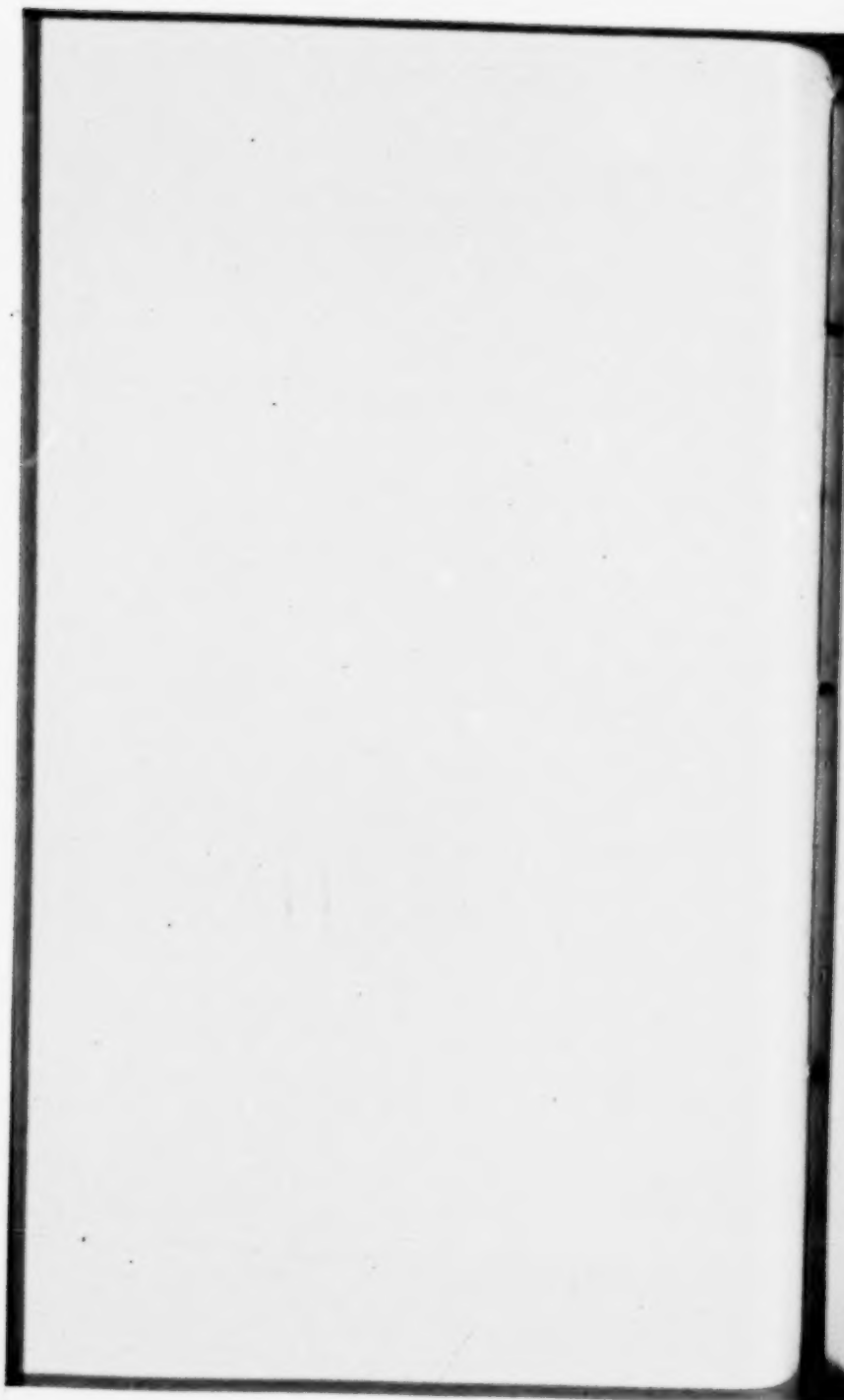
600 Date	Crude Ore Net Weight	Net Proceeds Crude	Average Price Per Ton	Concentrates Tons	Net Proceeds Concentration	Average Price Per Ton	Total Net Proceeds
1913.							
May	1,800.30	88,499.40	49.16	1,017.60	37,030.52	37.27	126,430.01
June	1,704.15	98,067.75	57.55	1,157.16	46,583.75	40.52	144,651.50
July	1,750.53	106,830.75	61.03	1,540.09	56,094.96	36.81	163,925.71
August	2,154.43	106,369.68	49.37	1,116.98	43,431.06	38.99	149,800.77
September	1,037.36	87,291.83	43.08	820.39	26,594.96	32.42	113,886.79
October	1,424.91	93,297.08	65.47	681.80	24,883.67	36.49	118,180.75
November	1,788.68	86,898.56	48.58	1,201.40	36,343.66	30.25	123,242.22
December	2,432.03	95,747.75	39.36	1,351.00	35,158.03	25.45	130,905.78
	14,992.19	763,031.59	50.89	8,916.45	367,940.24	34.53	1,070,971.13
1914.							
January	1,482.39	43,264.26	29.18	1,156.76	28,342.52	24.41	71,607.78
February	1,490.91	42,048.13	28.20	1,069.00	30,339.56	27.76	72,387.69
March	1,210.53	49,846.44	41.17	1,369.67	30,612.46	21.87	80,458.90
April	1,227.24	46,451.34	37.87	801.54	23,724.45	29.59	70,175.79
May	621.99	35,682.79	11.29	647.79	14,431.80	22.28	40,114.58
June	916.10	34,213.91	37.34	1,014.95	18,619.94	18.34	52,833.85
July	1,232.13	50,094.41	40.61	1,177.56	23,650.74	20.09	73,745.15
August	1,292.23	38,449.13	27.61	1,293.10	19,816.35	15.30	58,265.48
September	917.56	36,286.41	39.65	1,006.05	21,366.43	20.85	57,652.84
October	1,444.41	49,835.61	34.28	1,131.71	25,342.46	22.57	74,968.07
November	2,834.25	98,761.62	34.84	624.02	13,000.95	20.8	111,762.57
December	2,742.09	106,303.78	38.75	745.76	20,760.95	27.85	127,064.73
	17,532.46	621,037.83	35.42	12,100.91	269,839.70	22.28	890,867.53

CONKLING MINING COMPANY.

1915.									
January	2,717.40	81,463.14	29.98	830.94	17,002.47	19.98	98,467.61		
February	3,158.80	99,881.80	31.62	480.74	11,843.64	24.22	111,525.14		
March	2,378.19	84,321.19	32.70	601.41	13,049.00	23.66	99,870.19		
April	2,611.13	92,727.62	36.92	742.16	18,346.88	24.96	111,277.80		
May	2,963.67	101,554.56	34.36	674.80	18,801.20	28.00	120,355.78		
June	2,832.66	102,728.65	41.04	698.30	23,291.32	32.36	126,019.97		
July	2,347.20	89,431.14	38.11	1,000.90	36,449.20	35.35	125,900.34		
August	2,941.03	106,671.57	36.27	671.59	21,823.14	32.60	128,504.71		
September	2,519.99	104,528.13	41.48	662.28	23,493.25	35.47	128,021.38		
October	2,410.00	92,883.45	38.54	509.17	16,483.65	32.17	108,367.13		
November	1,806.53	57,924.30	44.31	704.02	26,030.32	36.94	83,954.62		
December	2,853.05	119,036.79	41.69	378.00	14,699.80	36.88	133,736.59		
	30,814.74	1,135,177.09	36.77	8,065.01	243,980.87	30.25	1,377,163.96		
1916.									
January	1,835.42	78,326.51	42.22	955.36	36,025.46	37.70	114,363.97		
February	1,980.05	92,850.85	47.37	365.14	17,011.54	46.59	109,862.67		
March	1,737.34	85,541.00	49.23	411.36	13,334.32	37.29	100,875.22		
	5,552.81	256,739.34	46.23	1,731.72	66,371.62	39.48	325,101.96		

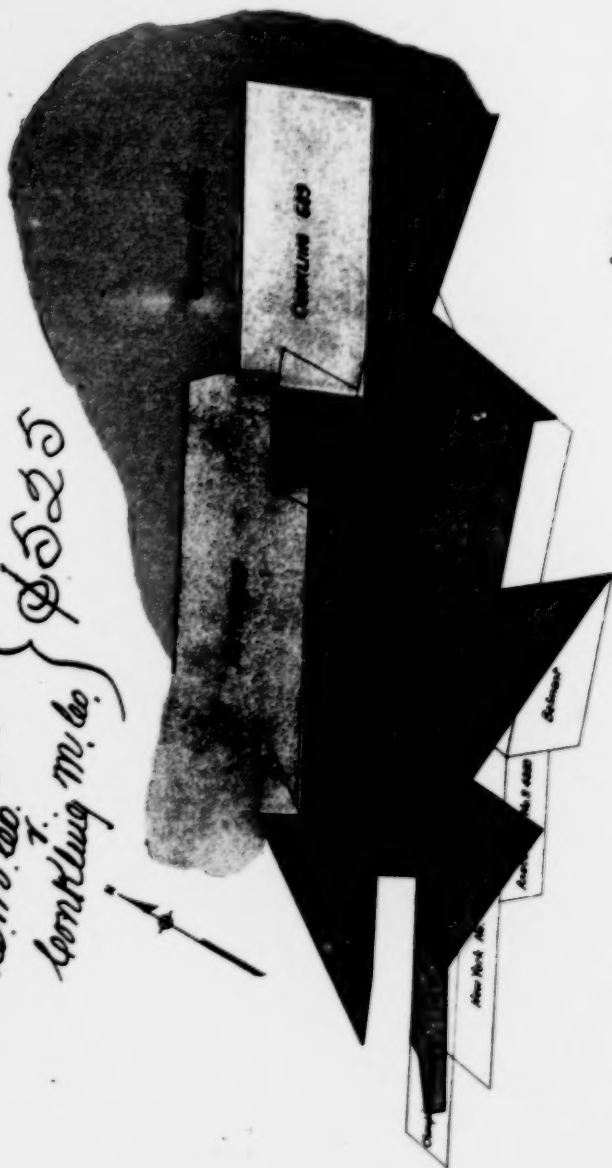
Here follows Exhibit 70

Record of Crude Oil Sold
by the
Kearns-Keith Mining Company
During
May and June, 1907





+
 Silver King
 Co. M. Co.
 } \$525
 }
 Comstock M. Co.



(EXHIBIT 86.)

Extract of the Sales from Silver King Coalition Mines Company for October, November, and December, 1906.

1906,	Crude ore net weight.	Net proceeds crude.	Average price per ton.	Concen- trates, tons.	Net proceeds concentrates.	Average price per ton.	Silimes, tons.	Net proceeds silimes.	Average price per ton.	Total net proceed.
October	1,157.08	53,917.00	46.59	554.34	23,922.51	43.15	257.68	2,001.24	7.76	79,840.75
November	1,305.77	61,053.23	46.75	490.98	30,416.64	41.58	231.42	1,837.97	7.94	82,307.84
December	1,103.42	51,851.66	46.90	498.96	21,014.13	42.11	224.60	1,665.70	7.41	74,531.49
	3,566.27	166,821.89	46.77	1,544.28	65,353.28	42.31	713.70	5,504.91	7.71	237,680.06

6/6/17.

Superintendent's Report for the Year 1914.

Hon. Thomas Kearns, General Manager Silver King Coalition Mns. Co.

DEAR SIR:

I herewith submit my report of operations of the Silver King Coalition Mines Co. for the year 1914 ending Dec. 31st, my report will deal with the property in three sections, the Hanauer, Silver King and the Alliance.

Hanauer.

The development work on the No. 1 fissure in the Thaynes crosscut in 1913 did not show any bedded ore, but last year we developed a series of three beds that overlap each other a short distance horizontally, and the distance between them is, from the first bed to the second, going Easterly, 2' from the second to the third 14.5' and the conditions does not show that the faulting took place after the ore was deposited, the total length of these beds is 400', maximum width 50' average width 23' average thickness 2.5' average height above the Thaynes crosscut is 50'. We have put 6 raises from these beds in the fissure but so far have not found other beds, one of these raises reached a h-ight of 95.5' deg. but did not encounter anything of value. We are sinking a 45 deg. incline winze directly under where the Thaynes crosscut cuts the fissure at the present writing it is down 50' and there is a little ore showing in the fissures at the bottom.

From these ore beds and the fissure in 1914 we sold 473.678 tons of ore 43.594 was concentrates, the value per ton of the concentrates after Smelter deductions was \$28.04 and the crude \$26.83, total received from the Smelting Co. \$12,763.12, there will be a much better showing from this ore body for 1915.

410' North of this No. one fissure is what is called the No. 5 fissure, we drifted N. E. on this fissure for a distance of 420', at 300' there was a little good ore, on this we raised, but it did not prove to amount to much but as it was desired to connect with the Roaring Lion workings, where it is supposed there is a good chance to get ore in paying quantities, the raise was continued up to the desired height, 92', at this h-ight we also had some ore in the fissure but not in paying quantities. The maps shows that the top of this raise is
520 on the same level as the Roaring Lion workings and 165 N. E. we have reached a distance of 195 but have not made the connection yet, as our Surveyor does not guarantee the survey of the Roaring Lion workings it may be necessary to feel around some.

460' West of the Aetna Shaft station on the Hanauer tunnel level

we have sunk a winze about 40' deep in the Crescent fissure and the showing is such that we are sure that it will pay to continue prospecting in that section, in sinking this little hole we took out of it 133 cars of mill ore. (The boss at the Hanauer just told me that he had holed into the old workings of the Roaring Lion.) In the year just finished we have expended considerable labor in the Columbia raise, half way down there was a vertical drop of 12', this we cut out, and there was a short section near the top that was not connected through, this we also cut out, we also had to do a lot of timbering, but now we have got a track from bottom to top of 20# rails, got a station cut out and timbered at the Hanauer level and a good engine stationed there also a good skip ready, and the best bell line on the job, in fact we are in good shape to do work in that section, and hope to get at — very soon. We also did some necessary retimbering in the K. K. Incline and cleaned the mud out of it to the bottom, and have put the K. K. #2 & #3 drifts in good condition.

Alliance.

Owing to troubles with water in the shaft we only succeeded in getting it down 55', making the total depth Jan. 1st, 311' at the present writing the shaft is 341', and as we have received the new electric pumps we will soon be in a position to resume sinking.

During the year we opened up a fine body of ore on the first level which had produced 1,500 cars of mill ore and 150 of first class, at the present time it is producing nearly 100 mine cars per day of mill ore, and 5 of first class, as far as we can measure this ore body we are safe in stating that not more than 1/3 of it is mined, and it may develop a great deal more than we can possibly measure at the present time. This ore body is directly in line with the Elephant slope, and will connect with same, both ore shoots have a direct connection with the Crescent fissure.

On the 2nd level we have crosscut-ed to the Crescent fissure and at the point where we did cut it it does not show as much mineralization as on the 1st level, 165' before we cut the fissure in the crosscut we went through a break that shows good ore in small quantities for a distance along the break Easterly and Westerly of 200', no doubt this ore has come down on the break from a body between the 1st and 2nd levels, and holds out fine indications for that level.

As time goes on the great station shows the wisdom of its position and construction, it has not, nor will it, cost a cent for maintenance, and the equipment that it contains is all that could be desired for quick and cheap work. During the year we excavated a blacksmith shop and a carpenter shop a 100' from the shaft so that we have a complete mining plant at that point, we have also put in another Sullivan Angle Compound compressor of a capacity of 1,000 cubic feet, this gives us a combined capacity at that point of 1,700 cubic feet of free air per minute, that should enable us to go down with the shaft without hinderance for lack of air, inasmuch as the large com-

pressor at the portal of the tunnel is also available for that section of the property.

Silver King Section.

The great 900-800-700, and 600 carbonate stopes that has produced so much of the production of this property in the past, has been sustained by new ore bodies on the 8th and 9th levels near the shaft, and the Flossie winze also the 50 foot level of the Creole these places mentioned are producing about 50 tons of mill carbonate ores per day with one shift, and about 5 tons of first class, but while the carbonates are decreasing, the sulphides are increasing and had we a free hand in the Columbia raise section we could mine all the ore our mill could handle, this condition we hope to have in the near future.

On the 11th level in the hanging wall drift, which is in the vicinity of the Donkey raise, and the Gash vein, we are drifting Easterly with a good showing in the drift which is following a fissure, we have taken a great deal of ore from this fissure in the last year having followed a good shoot from the 11 to the 10th level and for 25' below the 11th.

The 1250 level from the Brown Raise has also been a good producer in the year just past, we have been hampered somewhat in our development work at this point on account of the proximity of the King Consolidated interests, but since the readjustment of these interests we have now a free hand to go in the direction that looks to us the most promising to find ore, that is towards the Parson stope, we are drifting in that direction not only from the 531 Brown raise, but also from the Skiddo raise on the same level and we are glad to state that we have a shoot of ore in both drifts that in the Skiddo drift being exceptionally good, running at times as high as 300 ozs. in silver, this drift is 400' West of the Parson stope, and the Brown raise drift is 150' East.

We are sorry to state that we have not been able to advance the Mud drift on the 1,300' level Westerly during the year just past for fear of flooding the mine with water, as this is a promising section, the drift at present is making about 600 gallons of water per minute. We have followed the Whale ore body from the 1,300 level up to near the 1,100 and the trend of this ore shoot is to the S. West. We have mined this ore for a distance of 1,200 feet and it has raised to the S. West in that distance 133', the face of it is nearly as far west as the face of the Mud drift, which would indicate that we might be able to drift Westerly on a level say of 200' above the 1,300 without encountering any great amount of water, this plan we are proceeding to carry out, we have now got a raise up in this ore shoot nearly 200' and we will start drifting to the West immediately, all the ore in this ore body up to this point has been mined.

A greater part of our first class ore mined in this year was taken from the American stope 55' below the 1,300' level and at the present writing there is a face of ore in that stope 50' wide and will average 3' thick all of which is first class. This ore body we are sure, will

connect with the Morrissey stope there is 300' between the two stopes, the American is almost a flat bed just about enough dip for drainage, and very uniform in every way, and at one place it was 100' in width and averaged over 3' in thickness. The Morrissey has been opened up from the King Consolidated line 8. Westerly for a distance of 200' in one place it is 100' in width and in several places it is nearly 20' thick, it is a fine ore body, with numerous normal faults which step the ore down to the S. West, in fact we have not yet reached the upper plane on which the King Consolidated mined this ore shoot for a distance of nearly a 1,000' and where they came up to their end line, on this plane the ore is about 25' in height this face of ore is ours to be mined when we want it.

Mill.

The Mill operated two shifts until Nov. 30th and thereafter one shift until this month, for the 12 months ending Dec. 31st we sent to the mill 61,255 dry tons, from this there was picked from 532 the conveyor belt 201 tons first class, and 1,147 tons of waste-rock, before this conveyor belt was installed it required two, and sometimes three men to tram the ore, now one man feeds the belt and the other, a cripple, sorts the above material, and in addition a large amount of iron and steel and wood. From the above it will be found that we crushed and milled 59,907 tons, and produced in concentrates 12,110 dry tons for which we received \$269,839.70 or at the rate of \$22.28x per ton. We find that our milling cost- are nearly the same as the Daly-Judge, and much better than the Daly-West before the fire. The ratio of concentration was 4.9 tons into one, and the recovery was lead 86.9 Silver 71.8 Gold 61.6 these figures show a gain over 1912-1913 of Lead .02% Silver .62% Gold 13.81%.

The development work amounted to 15,723' as follows:

Drifts & Crosscuts.....	11,947'
Raises	2,207'
Winzes	730'
Shaft	56'
Silver Hill Station, rock shoots, water tanks (sump)	783' or 16,834 cubic feet
	<hr/> 15,723'

The ore mined and credited to the different stopes and levels is as follows:

700 Level stopes	First Class.	b	Second Class.....	297 cars
800 " " " "	" "	1855	" " " "	13918 "
Florio Winze	" "	294	" " " "	1037 "
Cresle " " "	" "	215	" " " "	9639 "
Stopes	" "	1593	" " " "	34341 "
Alliance Elephant stopes	" "	90	" " " "	423 "
" 100 Lev. " "	" "	134	" " " "	1931 "
Columbia Raise	" "	171	" " " "	490 "
Hansauer	" "	475	" " " "	544 "
1100 Hangingwall Drift Stope	" "	156	" " " "	3523 "
1250 Down Raise.....	" "	1312	" " " "	11990 "
Skidde	" "	380	" " " "	1574 "
Mad Section.....	" "	3871	" " " "	7930 "
American Stope.....	" "	5217	" " " "	1976 "
Kala "	" "	2040	" " " "	3392 "
		17452		98972 "

There was produced in development and repair work 89,397 mine cars of waste rock of this amount 23,709 was used as fill taking the place of timber, that is, there was nearly 27% of the waste rock broken left in the mine.

Surface Improvements.

Consist of an increase in the size of the Hansauer ore bin equal to double of its former capacity, and also a 100 ton ore bin at the Mill to take care of the Hansauer ore, and 600' of snow sheds over the tracks.

The price received for lead in 1914 was .0614 less than in 1913 and for silver 5.7102, which made a difference in our revenue of for lead \$90,486.26 and for silver \$80,910.96 or a total of 171,397.22 almost enough to pay one .15 dividend on the outstanding stock.

The physical condition of the property never looked better to me, and 1915 will surely be a good year for the stockholders in spite of the low prices for the metals.

Sincerely,

(Signed)

JAMES HUMES,

Supt.

(DEFENDANT'S EXHIBIT 92.)

S. K. C. Mns. C. Supt.'s Report for the Year 1915.

Hon. Thomas Kearns, General Manager Silver King Coalition Mns. Co.

DEAR SIR:

I herewith submit my annual report of operations at the above mines for the year ending December 31st, 1915.

Hanauer.

At this property we have not uncovered any new ore bodies and we have mined all the ore that we developed in the No. 1 fissure above the Thaynes crosscut, the ore from these stopes last year, with a little from a winze below the main tunnel near the Aetna shaft, netted the company after paying smelting and freight charges \$19,795.31 add to this the amount received from ores sold in 1916 and we have a total of \$32,558.43. Our expenditures for last year were:

Underground	\$15,903.70	
Outside labor	286.00	
Amunition	1,975.00	
Timber	569.00	
Hay and grain	278.25	
Compressed Air	1,999.00	
		\$21,001.45
Credits		99,795.31
To Balance		1,296.14
		<hr/>
	21,001.45	21,001.45

534 In addition to ore extraction we did 1,354 feet of development work consisting of 715' of drifts and crosscuts, 374' of raises, and 265' of Winzes, so that \$9,478.00 of the above costs are chargeable to development work.

The Roaring Lion fissure so far is very much of a disappointment as we haven't found any ore in the old workings worth mining, however we have got them in good shape and we are advancing a drift easterly on the fissure and it is looking very well but does not contain ore of commercial value, this drift is on the Hanauer tunnel level and is connected with the old workings through a raise the face of this drift will soon be under the westerly edge of the great ore bodies that were mined through the Aetna tunnel, and just as soon as we get under these old workings, or see favorable indications of getting ore by raising, we will do so. The development work in this fissure is not costly as the rock is easily broken and does not require much timber.

Directly under where we cut the ore in the No. 1 fissure I have put down a incline winze to a vertical depth of 130', there has been a little ore in the fissure all the way down this incline and at times we were able to save a little of it, at the bottom we drifted east and west a distance of 300' with very indifferent results I then crosscutted to the N. West to cut the No. 2 fissure that also carried ore on the tunnel level, at the present writing we are just about to cut into this fissure, and when we do, it is our intention to drift on it a short distance and should it prove no better than No. 1 fissure at that depth we expect to quit development work at that level. We have also done a little

FOLD*OUTS ARE TOO LARGE TO BE FILMED

work in a fissure between No. 1 and the Roaring Lion, in the Thaynes Crosscut, but without results.

285' West of the top of the K. K. Incline in the Thaynes crosscut is what we call the No. O fissure where we cut it with the crosscut it showed good values, and we drifted east and west on it also raised up on it 75' but did not cut anything of commercial value.

In my last annual report I mentioned that I was sinking a winze in the Crescent fissure 460' west of the Aetna shaft station from the tunnel level, we got that down a 100' but it did not develop anything very large, I am not crosscutting from the bottom of it into the beds where I am liable to cut some ore as the mineralization is
535 quite strong all the way down in this winze.

1300 Section.

This section has been a fine producer in the last year, that is from the Morrissey and Skidoo stopes, at the present writing these stopes are not looking as if they would hold out but a short time, still one can never see very far ahead in ore bodies of the character of these. We have not been able to advance the Mud drift any this year on account of the risk of a great inflow of water, but we have advanced the 1100 level just above the Mud for over 300' without encountering any ore or water and we are still going west at that elevation. We have advanced the Cavanaugh drift west about 600' and in all that distance the drift has been in a body of iron, sometimes we would get a little mill ore out of it, but so far nothing of importance, perhaps drifting or raising will develop an ore shoot, there is no reason to think differently, this same fissure produced the Bonanza stope.

I put down a -incline winze in an easterly direction from the face of the French drift to a vertical depth of 130'. My object in putting down this winze was the hope that I might cut one of the fissures, in fact, the fissure that makes the ore in the Skidoo stope, not that I expected to get a continuation of that ore shoot, for that dips to the East, but I am sure that most of the ore mined between the Donkey crosscut and the Skidoo stope has had its origin in that fissure, well I did cut a fissure that had 6" of ore in it that assayed 23.2 silver, 30.8 Lead and 1.4 Copper and we also cut water that drove us out, when we are better prepared to handle water on the 1300 this will be worth while doing more work on. About 300' east of the Donkey xcut on the main 1300 level I sunk a winze on a stringer of ore, I went down about 130' but it did not amount to anything, and as all the work was done in a broken up quartzite I turned the water into it and as a result we have been able to take our three pump men [of-] the 1300 pumps, this effects a saving of \$11.25 per day and also the electric power to run the pump.

The development work that I started at Mr. Keith's suggestion near the King Con shaft, has been prosecuted to a distance of over 200', and while we haven't cut an ore body, we have had assays that would go 2 to 3 ozs. in silver and about 1% lead, and I would very much dislike to quit this section now, as we are in a short silicious brown lime, just the stuff that we find the ore bodies in, and as there

536 is 300 or 400 acres of ground ahead of us that there never has been any prospecting done in, I would like to have your permission to get at this work in a way that I can make some headway, it is easy ground to mine and dry, and we have a mule on that level so everything is just right to do rapid work. My plan would be to start a drift from near the top of the O'Brien winze, and drift N. West until we made connections with the work that we are doing from the King Con side, this would give us good ventilation and we would get there in less than 250' (see sketch) I have given this matter a good deal of study, and while I may be in error I conscientiously think that we should do a lot of development work in that direction as we cannot go west and we must get ore somewhere. We have made a plan and section of all the work done adjacent to the Blood xcut this I am sending you so that you may understand what I am getting at, we find that the black line cut near the head of the O'Brien winze is normal, but that cut in the connection between our work and the King Con is abnormal, otherwise, out of place. Lee is drifting on their 1700 level to cut the fissure marked "F" on the plan of the Blood crosscut.

900 Section.

The Royal stopes have not produced a great amount of ore in the last year, but the Creole upper workings, and the Victor drift section near the King shaft have done well and these two places look favorable at this writing, hence we expect to keep up our present production of carbonate mill ore for some time to come. The Creole section produced about 500 tons of 1st class ore and 7,237 cars of mill ore. The Victor stopes 50 tones first class and 7,522 cars of mill ore.

Silver Hill Section.

On account of trouble with water, power, etc. the progress made in the shaft has been very much retarded and it is worse the deeper we get, in order to proceed further, two things must be done. First we must have a greater volume of air delivered at the shaft at a pressure not less than 75# Second we will have to increase our sinking pump capacity, this last is easy of accomplishment but would be of no benefit without the first, which is not so easy, there is too much detail to these matters to embody them in this report.

The 100 stopes have produced a great quantity of ore in the last year (see table on another page) and will produce a large amount yet. One the 200 level the ore body looks better at the present time than at any time in the past, and the future of the 400 for ore production looks very encouraging, up to the present writing we have uncovered a bed of mixed mill and shipping ore on that level
537 of about 75' long by 50 wide, we are pushing that level out towards the crescent fissure with the hope of cutting other ore bodies.

Table of Production Credited to the Stopes Where Produced.

1300 Section:

Morrissey Stopes	First Class,	25124.04	Tons Mill Ore	3810.96	Tons
Skidoo Stopes	First Class,	1596.875	Tons Mill Ore	488.37	Tons
Manganese, Brown & Parsons Class,		338.885	Tons Mill Ore	2354.24	Tons
Carty below 1300	First Class,	153.18	Tons Mill Ore	390.88	Tons
Mud Stopes	First Class,	262.3	Tons Mill Ore	223.23	Tons
Hangwall stopes	First Class,	101.16	Tons Mill Ore	1289.12	Tons

900 Section:

Creole	First Class,	638.95	Tons Mill Ore	5513.79	Tons
Royal Stopes	First Class,	247.61	Tons Mill Ore	5347.7	Tons
Flossie	First Class,	90.23	Tons Mill Ore	1269.1	Tons
Victor Drift (Near shaft G. L.)....		65.05	Tons Mill Ore	5730.93	Tons
Old Stopes (7 & 800 levels).....		218.23	Tons Mill Ore	1247.23	Tons
Phria stopes 500 level.....		215.08	Tons Mill Ore	600.37	Tons

Hanauer Section:

All Stopes.....	1096.41	Tons Mill Ore	1625.89	Tons
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Alliance Section:

100 Stopes—600 Lev.....	647.35	Tons Mill Ore	14618.38	Tons
200 Stopes—700 Lev.....	10.49	Tons Mill Ore	1224.36	Tons
	30805.84		45734.56	Tons

The development work, or footage amounted to 10,674 feet as follows:

Shaft 204'. Winze 1036' Raise 2252' Drifts & Cros-cuts 7182'.

Pump stations & Chute pockets 13064 Chute feet.

From this development work was produced 55,002 cars of waste.

16315 cars of this was placed in the stopes for filling, nearly 30%.

The Crude ore shipped contained,	Silver	1,569,643	Ozs.
	Lead	18,325,050	g
	Gold	1,769.35	Ozs.
	Copper	1,076,925.66	g

Concentrates	Silver	275,109	Ozs.
	Lead	5,198.190	g
	Gold	542.38	Ozs.
	Copper	124,460.86	g

In working out the above figures it was interesting to note that the ore carried so much copper and gold, and it has disclosed the fact that it will pay to segregate the ore from the different parts of the property, in the King from the 1100 down is where we get the copper, hence the first class from that section should be put in bins

by itself, so also should the 900 and the levels above, and the Silver Hill ore should be shipped by itself, so should the mill rock gotten from the 1300 be milled separately from the Silver Hill, as this last carries very little copper or gold. The money received from 538 the smelter for copper amounted to \$67,197.68 and for gold \$43,822.90 total for these two metals, \$111,020.58, or a little over 8% of the total amount received from the smelter.

Our returns from the smelter after deducting all their charges amounted to \$1,376,846.66, of this amount the mill produced \$243,986.66, or a little over 17%. The New Process to March the 1st has cost \$62,394.47 and the mill expenses (labor and supplies) \$47,420.72 making a total of \$109,815.19, or 45% of the total amount received for mill ore.

We cannot conclude this report as we did last year's report with the statement, that, "The physical condition of the property never looked better, and that, "the coming year would be a good one for the stockholders etc." at the same time we have no reason to feel discouraged.

Ever since we resumed operations after the strike, I have inaugurated a strenuous campaign for the reduction of costs in every possible way, this will be noticed most in the pay rolls, instead of showing a 7% increase they will, all except the mill, show a decrease, and if we could stop the Silver Hill shaft I could make a still further cut in our expenses for labor and power, of better than \$6,000 per month. I am sorry to state that our mill labor has advanced 100% per hour of operation, (see enclosed mill reports one for July by Buck, the other for March by Savage) and this in the face of the fact, that I cut out two dryer trammers per shift by placing heaters in the concentrates bin at the sampler, also the power consumption, and water used has about doubler, and the capacity of the mill has not been increased one pound, that is if we try to accomplish the best results in saving the metals.

Sincerely,

(Signed)

JAS. HUMES,

Sup't.

(DEFENDANT'S EXHIBIT 96.)

6/7/17.

(Excerpt of Shift Bosses' Ore Extraction Book of the Silver King Coalition Mines Company.)

Parts for a Comet "D" D.D.J. Crusher.

Steel Oscillating Bushing.....	\$46.50
Mang Steel Head 14 x 27½. R. R.....	208.00
Spindle with Toe & Key.....	336.00

All f. o. b. Milwaukee, Wis.

Alliance & 1300 Mill ore, Jan. to June 1st, 1916.

Mill heads 9,240.3 tons Cons. 2,008.761 tons apportioned as follows:

Alliance	1044.778 tons
1300 Section.....	963.983 "

539 Alliance 6,776 mine cars @ 1418¢

1300 Sec. 6256 mine cars @ 1418¢.

Average value per ton Cons. \$34.99 per car \$5.396 4.6 to 1.

Mill lots 1-3-4-6-8-9-11 and 13.

Mill ore Alliance June 1st Dec. 31.

Lots 14-16-19-23-26 and 32.

Mill heads — 7,308.394 Tons.

Cons. 1,570.514 " — — — 4.6-1.

Mine cars 10,530 Wt. ave 1388¢.

Ave per ton \$32.25 per car \$4.81.

Assay heads	Au.	Ag.	Pb.
	.0221	5.35	6.88
Tails .....	.081	1.3	.71
Cons .....	.075	19.07	28.6

Alliance first class. June 1st to Dec. 31st, 1916.

Crude lots 43-68-73 and part of 80—298.909 tons. Per ton \$38.80.

Au.	Ag.	Pb.
.025	17.81	28.6

Tramway costs 1916	\$9,331.93
Cost per ton of ore.....	0.382
Tons of ore shipped	28,406
Milling .91 Tram Smf.....	.328 = 1.258
Value per ton of ore shipped from the different sections, Skidde	\$89.04
5-7- & 900 Levels	50.09
Also hanging W. Stope, 1300 Section	49.49
O'Brien stopes	43.86
Alliance	38.80
Average Crude	\$52.17
" Cons.	36.84

Ratio on production 1913, 1914, - 15 - 16 = 30.02 to 1.

Production all to all the Mine - 4.6%.

\$1,344,213.95

All 62.255.86 = 4.6%.

(DEFENDANT'S EXHIBIT 97.)

6/7/17.

Excerpt of Shift Bosses' Ore Extraction Book of the Silver King Coalition Mines Company.

Rock Drills.

C #10 & C110 Unmounted	\$185.00
BCR 430 Jackhammers.....	100.00
Silver Hill Shaft 673' cost	\$150.80

Wt. of mine cars for the following years

1913 - 2nd class	1527½	1st class	2131½
1914	1163		2009
1915	1523		2008
1916	1418		2381

Average 1408½ 2158½

540

Dead work cost	1913	\$13.28	....
" " "	1914	16.78	1.90
	1915	12.19	2.43
	1916	16.48	2.79

Average \$14.92.

Average Deg. concentration May 1912 to 1916 -- 5.75 into 1 Cost for Milling, sampling & tramway—\$1.8536. Scofield.....	.91
Milling, Tramway—Sampling.....	.328

1.238

Silver Hill shaft first 105 in Aug. Sept. Oct. Nov. 1912.....	\$64.96
1913—117'	113.71
From then on 656' cost.....	150.80

Court of appeals *et* rendered decision in Conkling in March 1916 and we quit thereafter as soon as we got the stope in order.

Average lot of cars of rock for.....	1913, 1st class	2131 2nd class	1827
	1914 "	2000 "	1163
	1915 "	2008 "	1523
	1916 "	2381 "	1418

Cost of Mining \$5.50.

To get deg. of concentration

Heads 6.2 Less tails 1.1—5.1

Cons. 45.9 " " 1.1—44.8

Hence 5.1)48.8(8.78 into 1 then multiply the deg. of concentration by number of tons cons, the results will be the number of tons Mill heads. 43 long, 28 wide, 24 deep.

(Here follows diagram marked pages 541-542.)

*Summary of Coal Analysis Sheet of Silver King Coalition Mines Company
for 1915.*

Ore Extraction (77424 tons).

	Amount. Per ton.		Total.
Labor	129646.51	1.602	
Compressed Air and Machines	28814.33	.373	
Explosives	14480.87	.188	
Tramming	16451.20	.212	
Hoisting	22775.02	.295	
Timber	6302.48	.082	
Supplies			
Lighting	2481.64	.032	
Mine Repairs	10000.03	.246	
Pumping	10578.18	.134	
Teaming Hauler			
Ore Hauling	702.25	.009	
Assaying	776.70	.010	
Superintendence	2500.47	.032	
Insurance	960.92	.012	
Personal Injury ...	10834.44	.134	
General Surface			
Expense	1247.31	.016	
Shops	1023.71	.013	
New Machinery	18649.80	.240	286104.46—2.695 per ton extracted
Development and Prosp'g (10614 ft.)		per ft.	
Labor	72855.80	6.676	
Compressed Air and Machines	24416.27	2.238	
Explosives	9582.80	.870	
Tramming	13852.85	1.260	
Hoisting	11440.70	1.050	
Timber	3281.54	.300	
Silver Hill Shaft ...	28000.12	2.721	
Lighting	1025.00	.003	
Teaming			
Superintendence ...	1254.76	.114	
Personal Injury ...			
General Surface			
Expense	1100.00	.106	

15.446 per foot

108578.11—2.178 per ton extracted

Milling (45734 tons milled) per ton.

Labor	20010.16	.438
Power	9134.42	.200
Heating and Lighting	1147.54	.026
Supplies		
Repairs	11144.29	.244
Pumping	4250.34	.003
Assaying	2144.19	.047
Superintendence	1029.03	.025
Insurance	620.64	.013

544

Teaming			
Impound	218.96	.004	
New Process	50515.02	1.301	100815.19-1.419 per ton milled
Market Expense (38890 tons shipped)			per ton.
Sampler	9489.10	.245	
Tramway and Loading	10520.41	.270	
Assaying	1706.95	.043	

.558 per ton shipped

-21716.46- .289 per ton extracted

General and Office Expense			
Salaries and Expenses	7089.53	.001	
General Expense	4789.58	.002	
	16767.76	.217	28646.87 .370 per ton extracted
Legal Expense			
Sick and Accident Insurance			
Administration Expense			
Salaries and Exp. Officers	10204.36	.132	
Salt Lake Office	1932.98	.025	
General Expense	88.40	.001	12285.74 .158 per ton extracted
Survey			2800.25 .026 per ton extracted
Grand Total			-632451.64 8.168 per ton extracted
38890 tons sold. Realized \$1,376,846.06			17.78 per ton extracted
			35.41 per ton sold

(PLAINTIFF'S EXHIBIT 117.)

*Summary of Cost Analysis Sheet of Silver King Coalition Mines Company
for 1914.*

	Amount per ton.	Total.
Ore Extraction (77439 tons).		
Labor	158500.43	2.047
Compressed Air and		
Machines	27301.74	.354
Explosives	15807.68	.206
Tramming	17854.00	.231
Hoisting	28004.01	.363
Timber	12710.92	.164
Supplies		
Lighting	2806.23	.034
Mine Repairs	28278.38	.365
Pumping	12841.37	.167
Teaming		
Assaying	536.11	.007
Superintendence ...	2800.00	.034
Insurance	809.68	.012
Personal Injury ...	4375.20	.056
Ore Hauling-Hanauer	250.06	.003
		313002.41 4.012 per ton extracted
Development and Prosp'g (15723 ft.)		
		per ft.
Labor	117512.71	7.474
545		
Compressed Air and		
Machines	25027.85	1.582
Explosives	14418.11	.917
Tramming	17386.23	1.107
Hoisting	9373.17	.597
Timber	3435.27	.220
Silver Hill Shift....	5542.82	.352
Lighting	1071.75	.107
Teaming	23.23	.000
Assaying		
Superintendence ...	1200.00	.076
Personal Injury.....	100.00	.006
Silver Hill Station..	16536.81	1.052
Alliance Tun. Repairs	429.94	.027—212067.80 2.746 per ton extracted
		13.527 per foot

Milling (38007 tons milled) per ton		
Labor	24481.48	.900
Power	4335.86	.000
Heating and Light- ing	1619.05	.027
Supplies	23.94	.000
Repairs	20002.47	.340
Pumping	3401.95	.057
Assaying	1325.71	.022
Superintendence	600.00	.011
Insurance	620.64	.011
Teaming	30.00	.000
Tailings Dam	161.42	.002
		.057 per ton milled
	57363.03	.740 per ton extracted

Market Expense (29642 tons shipped) per ton		
Sampler	9038.41	.305
Tramway and Load- ing	5068.14	.191
Assaying	1232.16	.041
		.537 per ton shipped
	15039.71	.506 per ton extracted

General and Office Expense: Per Ton Extracted		
Salaries and Ex- penses	5597.43	.072
General Expense....	1560.47	.021
Taxes	42311.86	.545—49409.76
Legal Expense	1825.00	.024—1825.00
		.624 per ton extracted

Administration Expense:		
Salaries and Exp. officers	9000.00	.124
Salt Lake Office....	3437.15	.044—13037.15
Mine Survey	2977.37	.009—2977.37
New Machinery	21418.17	.276—21418.17
Depreciation .....		.376 per ton extracted

Grand Total 687700.18 8.879 per ton extracted

29,642 tons sold. Realized \$890,897.53.. = 11.50 per ton extracted
= 30.65 per ton sold

546 Thereafter, and on March 27, 1918, the Court entered its decree in favor of the plaintiff for the sum of \$542,222.58.

FOLD*OUTS ARE TOO LARGE TO BE FILMED

(Stipulation as to Transcript of Record.)

It Is Hereby Stipulated between the parties to the above entitled cause that the record on the appeal in this cause, heretofore taken by the Conkling Mining Company to the Circuit Court of Appeals, together with all exhibits, papers, records and documents sent up on said appeal, shall now be deemed to be a part of the record on appeal in the present appeal of the defendant Company from the decree rendered upon the accounting herein on the 27th day of March, 1918, in favor of the plaintiff and against said defendant, for the sum of \$542,222.58.

And it is further stipulated that said portion of the record which was lodged in the Circuit Court of Appeals upon said appeal by said Conkling Mining Company, shall be added to and taken to be a part of the record which shall be forwarded to and docketed in this cause in the Circuit Court of Appeals by the appellant, Silver King Coalition Mines Company, with the same force and effect as if prepared, certified, sent up, lodged and docketed in said Court of Appeals upon the present appeal of said Silver King Coalition Mines Company.

E. B. CRITCHLOW,
W. W. RAY, AND
W. J. BARRETTE,
Solicitors for Respondent.
W. H. DICKSON,
A. C. ELLIS, AND
THOMAS MARIONEUX,
Solicitors for Appellant.

Dated: May 20.

Endorsed: Filed in the District Court on June 28, 1918.

(Approval of Statement of Evidence, etc., by District Judge.)

UNITED STATES OF AMERICA,
State of Utah, ss:

I, Tillman D. Johnson, the Judge presiding at the trial of the above entitled cause (in the taking of the account) hereby certify that the foregoing is a full, true and correct statement of all
547 the proceedings in said cause after the reversal of the decree entered herein by former Judge John A. Marshall, including a full, true and correct statement of the substance of all the evidence and proceedings having any bearing upon the assignments of error filed herein by the appellant, Silver King Coalition Mines Company, or necessary for the hearing of the cause on appeal, including full, true and correct copies of Exhibits (maps) 1-20, map Ex. 24 Exs. 45 46, 48 68 70 85, 86, 91 92 96 97 100 116 117.

And I hereby further certify that a stipulation has been filed in this cause by the parties requiring the Clerk to send up the original

of the following exhibits, namely: Ex. 1 to 20 (maps), 24 (map) 76, 86, 87, 90, 94, 109, 118, 119, 120, 121, 122, and 123 to 139, 45 (map) 85 (map), 41 42, 43, 44, 53, 59, 60, 61, 62, 63, 68, 69, 70, 71, 72, 73, 74 75

And I hereby further certify that the exhibits in the certificate referred to were all the exhibits used upon the taking of the accounting which have any bearing upon the questions raised in the assignments of error, or necessary to the hearing of the cause on appeal of said Silver King Coalition Mines Company; and said original exhibits, as well as the copies hereinbefore set forth, are hereby expressly made a part of the record with the same effect as if they were physically attached to the statement of the evidence, physical attachment being impracticable—Wherefore, the foregoing statement of the evidence and proceedings, including all the exhibits referred to are hereby approved and made a part of the record herein pursuant to the provisions of the equity rule, 75-B.

(Signed)

TILLMAN D. JOHNSON,

Judge.

Dated: June 19, 1918.

Endorsed: Filed in the District Court on June 19, 1918.

(Petition for Appeal of the Silver King Coalition Mines Company.)

The respondent herein, Silver King Coalition Mines Company, conceiving itself aggrieved by the decree made and entitled in the above entitled cause, on the 27th day of March, 1918, wherein and whereby it was ordered, adjudged and decreed that the complainant in said cause have and recover of and from the said defendant the sum of \$542,222.58, together with costs,

548 Now comes Thomas Marioneaux, one of its solicitors, and petition the said Court for an order allowing this defendant to prosecute an appeal from said decree to the Honorable United States Circuit Court of Appeals for the Eighth Circuit; for the reasons specified in the assignments of errors filed herein, and that a transcript of the record, papers and proceedings upon which said decree was made, duly authenticated, may be sent to the United States Circuit Court of Appeals for the Eighth Circuit; and also prays that an order be made fixing the amount of security which this defendant shall give and furnish upon such appeal, and that upon the giving of such security all further proceedings in this Court be suspended and stayed until the determination of said appeal by said United States Circuit Court of Appeals for the Eighth Circuit; and your petitioner will ever pray.

W. H. DICKSON,
THOMAS MARIONEAX,
A. C. ELLIS,
R. G. LUCAS,

Solicitors for Defendant.

W. H. DICKSON,
Of Counsel.

We acknowledge receipt on this 17th day of April, 1918, of copy of the foregoing petition for appeal.

PIERCE, CRITCHLOW &
BARRETTE,
Solicitors for Complainant.

Endorsed: Filed in the District Court on April 17, 1918.

(Assignment of Errors on Appeal of the Silver King Coalition Mines Company.)

Comes now the defendant, Silver King Coalition Mines Company, and files the following assignments of error upon which it will rely upon the prosecution of its appeal from the decree made and entered herein by this Honorable Court on the 27th day of March, 1918.

Assignment of Error No. 1.

The Court erred in overruling the defendant's motion to be permitted to prove that, after the decision of the Court of Appeals reversing and remanding this cause, the defendant had procured to be run and excavated a crosscut entirely across the Brave Columbia, Constitution, Cumberland and Monroe Doctrine claims, cutting the respective points of discovery in said claims; that said cross-
549 cut reached the bed rock clear across said claims, and revealed and disclosed the fact that there was no vein coursing longitudinally or approximately parallel to the side lines of any of said claims, or running northerly or southerly through the said claims, or easterly or westerly through or near the respective pits designated as points of discovery of said claims, which ruling was made by the Court on, to wit, the 20th day of January, 1917.

Assignment of Error No. 2.

The Court erred in entering in this cause an interlocutory decree or order requiring the defendant to account to the plaintiff for the value of ores taken by defendant from the Conkling mining claim U. S. Lot No. 689, said decree being entered and filed herein on the 20th day of January, 1917.

Assignment of Error No. 3.

The evidence is insufficient to justify the Court's finding, and the Court erred in finding and holding that the metallic contents of all the ores taken by the defendant in the year 1907, should be determined from the average metallic contents of all the ores shipped by it from its entire mine for the months of June, July, August, September, October, November and December, 1907, and that the prices to be allowed plaintiff for the ore in question shipped in 1907, should be fixed by taking the average of the prices received by the defendant for all of its ores shipped in said months of 1907; "upon the

principle applicable in the case of confusion of goods"; and in finding that the defendant received for the first class ore shipped from the ground in controversy in 1907, \$38.72, and for the concentrates, \$44.81 per ton; for the reason that the plaintiff introduced no evidence of the value of metallic contents of the Conklings ores extracted in the year 1907, and no reason appears in the testimony for such failure on the part of the plaintiff—whereas the defendant introduced in evidence the smelter returns, giving the metallic contents of over 1,000 tons of said ore, which were separately shipped and sold by the defendant's predecessor, and produced the ore sales books showing the prices realized per ton by the defendant upon the sales of ore of the mineral contents of said 1,000 ton shipments (hereinafter referred to as the K. K. shipments) namely, \$26.22 per ton for first class orpping ore, and \$32.80 per ton for concentrates, during the year 1907; and introduced evidence which was undisputed, that said thousand tons of ore were taken from the heart of the ore body, and was the best ore ever extracted from the common property; and while the evidence shows (with the exception of said thousand tons) that the ore from the ground in controversy was mixed and shipped with ore from the defendant's exclusive mining property, no evidence was offered or received that such mixture of the ore was fraudulent, wrongful, or negligent; but the evidence shows that such mixture was innocently made upon a claim made in good faith by the defendant of exclusive ownership by virtue of a patent in the United States to the ground in controversy, and from which the ore was taken.

Assignment of Error No. 4.

The evidence is insufficient to justify the Court in finding and the error in finding that the first class ore extracted from the ore body in controversy in the year 1907, occupied in space only 6 cubic feet per ton, and the second class ore only 7.62 cubic feet per ton; that the plaintiff introduced no evidence and offered no excuse for failure to introduce evidence as to the space occupied by a ton of the ore in place, and extracted in the year 1907, and the only evidence offered or received by the Court in respect to the space occupied by a ton of the first and second class ore extracted in the year 1907, was contained in a joint report made by experts agreed upon at the close of the trial by plaintiff and defendant who, by the usual scientific test, using fair samples of the first and second class ore, examined and reported to the Court that the first class ore in place occupied 7.275 cubic feet to the ton, and the second class ore in place occupied 10.3 cubic feet to the ton; and no other evidence in regard to the space occupied by a ton of ore in place was produced upon the issue of the case; and the Court erred in its finding and conclusion as to the space occupied by the ore contained in the K-K shipments of 1907, 9,477 cubic feet only, and that the space occupied by the rest of the ore extracted in 1907 equals 40,523 cubic feet.

Assignment of Error No. 5 (1908).

The evidence is insufficient to justify the Court in finding and concluding, and the Court erred in finding and concluding, that one-half the ore extracted by the defendant from the ground in controversy in 1907, was first class ore, and the other half second class ore; for that the plaintiff introduced no evidence of the ratio of first class to second class ore extracted in said year, and the only evidence offered and received on the point was the testimony of two witnesses produced by the defendant, Mr. Hurley and Mr. Dailey, the first testifying that two-fifths of the ore was first class and three-

551 fifths second class; and the second, that one-third was first class and two-thirds second class, and two witnesses were produced and sworn and testified in the case on behalf of the plaintiff, who were familiar with the extracting of ore from the ground in controversy in 1907, and neither of said witnesses disputed the testimony of Mr. Hurley or Mr. Dailey on this question, and their testimony is uncontradicted; so that the evidence shows that there was extracted from the claim in the year 1907 (after deducting the K-K shipments) 37,341 cubic feet of ore, not more than 40 per cent of which was first class, equaling 2,053 tons of first class (instead of 2,975 tons of first class as found by the Court), and 2,175 tons of second class, equaling 756 tons of concentrates (instead of 2,975 tons of second class, equaling 1,035 tons of concentrates as found by the Court).

Assignment of Error No. 6 (1908).

(a) The evidence is insufficient to justify the finding of the Court, and the Court erred in finding that the ratio of first to second class ore taken in 1908, was one to two; for that the plaintiff introduced no evidence whatever of the relative proportions of first and second class ore extracted in this year, and offered no reason for failing to introduce such evidence; and the only evidence offered or received upon this point is the testimony of two witnesses produced by the defendant, who gave it as their judgment that there were extracted from the ground in controversy in the year 1908, eight cars of second class to one of first class. Their testimony was undisputed, and while, in the defendant's written account filed before the hearing, the ratio of first to second class ore is given as one to two, an amended account was filed with the consent of the Court on the 19th day of September, 1917, to conform to the evidence given upon the trial, in which the shipping ore extracted in 1908, is given as 397 tons and the concentrates as 976 tons, (2,808 tons of second class ore).

(b) The evidence is insufficient to justify the finding of the Court that the first class ore extracted in 1908, occupied in space 6 cubic feet per ton, and the second class ore 7.62 cubic feet per ton; for that the plaintiff introduced no evidence and offered no excuse for failure to introduce evidence as to the space occupied by a ton of the ore in place, and extracted in the year 1908, and the only evidence offered

or received by the Court in respect to the space occupied by a ton of the first and second class ore extracted in the year 1908, was
552 contained in a joint report made by experts agreed upon at the time of the trial by plaintiff and defendant who, by the usual scientific test using fair samples of first and second class ore, determined and reported to the Court that the first class ore in place occupied 7.275 cubic feet to the ton, and the second class ore in place occupied 10.3 cubic feet to the ton, and no other evidence in regard to the space occupied by a ton of ore in place was produced upon the trial of the case.

(c) The evidence is insufficient to justify the Court in finding that there were extracted in 1908, from the ground in controversy, 1,747.65 tons of first class ore and 3,495.3 tons of second class ore; for the reasons given under "a".

(d) The evidence is insufficient to justify the Court in finding that the average value of the first class ore extracted in 1908, was to be determined upon the principle heretofore stated under Assignment of Error No. 3; that is to say, at \$46.42 for the first class ore and at \$37.93 for the concentrates; for that there was no evidence whatever introduced by the plaintiff or by the defendant that the first class ore from the ground in controversy was of the value last stated, or that the concentrates were of the value last stated, or that the defendant received such prices for either said first class ore or concentrates; but the only testimony introduced in the cause in regard to the value of the first class ore and concentrates shipped from the ground in dispute in 1908, is the evidence afforded by the K-K shipments referred to and the ore sales books showing the prices actually received by the defendant for ore containing the metallic contents per ton contained in the K-K shipments; and the net prices received by the defendant in 1908, as shown by said books, for shipping ore of the value per ton of the ore contained in the K-K shipments, was \$20.26, and for concentrates of the value of the concentrates contained in the K-K shipments, \$25.68 per ton.

(e) The evidence is insufficient to justify the Court in finding and the Court erred in finding that no waste was extracted from the ground in controversy while the defendant mined the same in 1908; for that no testimony was produced by the plaintiff to such effect, and the defendant produced two witnesses who were familiar with the stope and who testified that the proportion of waste in the material excavated in this year from the ground in controversy was one-sixth to one-seventh, and no other testimony upon this point was
553 given in the cause. No claim was made for waste in 1908, in the original account filed before the hearing and in the amended account filed at the hearing. But the account filed on September 19, 1917, to conform to the evidence given upon the trial, and which was filed without objection by the plaintiff and by the consent of the Court, conforms to the evidence above stated, given by said witnesses.

Assignment of Error No. 7 (1909-1910).

(a) The evidence is insufficient to justify the Court in finding that the first class ore extracted in 1909-1910, from the ground in controversy occupied in space 6 cubic feet per ton for the first class, or 7.62 cubic feet per ton for the second class ore; for that no evidence was introduced by the plaintiff as to the space per ton occupied by either first or second class ore extracted in these years, and no evidence was offered or introduced in the case as to the space occupied by a ton of first class or a ton of second class of the ore extracted from the ground in controversy in these years, except that an experiment was made by experts agreed upon at the time of the trial by plaintiff and defendant who, by the usual scientific test, using fair samples of first and second class ore taken from the stope, determined and reported to the Court that the first class ore in place occupied 7,275 cubic feet to the ton and the second class ore in place occupied 10.3 cubic feet to the ton, and no other evidence in regard to the space occupied by a ton of ore in place was produced upon the trial of the case.

(b) The evidence is insufficient to justify the Court in finding and the Court erred in finding that the total number of cubic feet of first class ore extracted from May 1, 1909, to June 1, 1910, was 7,421.4, or the total number of cubic feet of second class ore extracted in the same period was 74,513.7; or a total of 81,935.1; for that, the actual number of tons extracted shown by the ore extraction books, and relied on by the Court in figuring the tonnage, shows that there were extracted from the ground in controversy in said period, of first class ore, 1,236.9 tons, and of second class ore, 9,778.7 tons, which equals, taking the expert's report as to the space occupied by a ton of first class and second class, 8,999 cubic feet of first class and 100,723 cubic feet of second class.

(c) The evidence is insufficient to justify the Court in finding and the Court erred in finding that the percentage of first class ore extracted from the ground in controversy from May 1, 1909, 554 to June 1, 1910, was 9.6 per cent, and the second class, 90.94 per cent; for the evidence shows that 8,999 cubic feet was first class and 100,723 cubic feet was second class, as stated above (8.2 per cent first class).

(d) The evidence is insufficient to justify the Court in finding and the Court erred in finding that the volume of ore extracted in the first four months of 1909 was 32,621.9 cubic feet; for that the evidence shows, as stated above, that the total number of cubic feet of ore extracted from May 1, 1909, to June 1, 1910, was 109,722, and the total excavation from May 1, 1909, to June 1, 1910, plus the first four months of 1909, was 133,650 cubic feet, which equals (assuming one-seventh of the material mined was waste), 128,009 cubic feet of ore, so that 133,650 minus 128,009 equals 5,641 cubic feet of ore extracted in the months of January, March, April and

May, 1909, which equals 462.5 cubic feet of first class ore (63.5 tons), and 5,178.5 cubic feet of second class ore (502.7 tons,—174 tons concentrates).

(c) The evidence is insufficient to justify the Court in finding and the Court erred in finding that the prices received by the defendant for ores extracted and sold from the Conkling ground in 1909, was for first class or shipping ore \$40.79, and for concentrates \$37.93; for that the plaintiff introduced no evidence whatever of the metallic contents of ores shipped from the ground in controversy, and offered no reason for failure to introduce such evidence, and the evidence shows that the ore from the Conkling ground, except said K-K shipments, was mixed and sold with ore from the defendant's exclusive property, but that such mixture was in good faith, the defendant claiming title under a patent from the United States, and the only evidence of the value of Conkling ore shipped in the year 1909, was the evidence introduced by the defendant that the metallic contents of said K-K shipments were equal to the metallic contents of any ore ever shipped from the ground in controversy, and the additional evidence furnished by the books of the smelting company, to which the ore was sold, and the books of the defendant Company, showing the average monthly prices realized by the defendant from the sale of silver, lead and gold during the year 1909, which evidence shows that the average value of the tonnage shipped from the Conkling ground in controversy during the year 1909, and the prices received by the defendant for ore of the value of the K-K shipments, was, for first class ore, \$21.73 per ton, and for concentrates, \$27.12 per ton.

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Assignment of Error No. 8 (1910).

The evidence is insufficient to justify the Court in finding and the Court erred in finding that the defendant received for the first class ore shipped from the Conkling claim in 1910, \$33.76 per ton or \$34.73 per ton for concentrates; for that the plaintiff introduced no evidence whatever of the metallic contents of ores shipped from the ground in controversy, and offered no reason for failure to introduce such evidence, and the evidence shows that the ore from the Conkling ground, except the K-K shipments, before referred to in these Assignments of error, was mixed and sold with ore from the defendant's exclusive property, but that such mixture was in good faith, the defendant claiming title under a patent from the United States, and the only evidence of the value of Conkling ore shipped in the year 1910, was the evidence introduced by the defendant that the metallic contents of said K-K shipments were equal to the metallic contents of any ore ever shipped from the ground in controversy, and the additional evidence furnished by the books of the smelting company, to which the ore was sold, and the books of the defendant company showing the average monthly prices realized by the defendant from the sale of silver, lead and gold during the year 1910, which evidence shows that the average value of the tonnage shipped from the Conkling ground in controversy during the year 1910,

and the prices received by the defendant for ore of the value of the K-K shipments was, for first class ore, \$22.10 per ton, and, for concentrates, \$27.63 per ton.

Assignment of Error No. 9 (1913).

(a) The evidence is insufficient to justify the Court in finding and the Court erred in finding that the excavation in the ground in dispute made in 1913, was 4,505 feet; for that the only evidence produced in regard to the excavation made in this year was the testimony of Mr. Brooks who made a survey in May, 1914, of the Toole stope, and gave its cubic contents as 4,505 feet and assumed it to have been taken out in 1913, he never having visited the ground between 1912 and May, 1914; whereas two witnesses who worked in the Toole stope testified that a portion of it was taken out in the year 1914, before Mr. Brooks's survey, and this is all the evidence introduced in regard to the excavation made in the ground in controversy in this year.

(b) The evidence is insufficient to justify the Court in finding and the Court erred in finding that one-seventh only of the
556 material extracted from the excavation in 1913 was waste; for that the shift boss books accepted by the Court as correct show that 80 cars of first class and 174 cars of second class and 57 cars of waste were actually sent out in cars from the Toole stope in 1913.

(c) The evidence is insufficient to justify the Court in finding and the Court erred in finding that 203.09 tons of first class and 346.8 tons of second class (120.63 concentrates) were shipped from the ground in controversy in 1913; for that the evidence shows without dispute that the average weight of the first class ore in a mine in the year 1913, was 2,131 pounds, and the average weight of a car of mill ore in the same year was 1,527 pounds, and that there were extracted in said year 80 cars of first class and 174 cars of second class ore from the ground in dispute, equaling 85.24 tons of first class and 132.8 tons of second class (46 tons of concentrates).

Assignment of Error No. 10.

The evidence is insufficient to justify the Court in finding and the Court erred in finding that the defendant received for first class ore shipped in 1913 from the ground in dispute, \$39.61 per ton for first class or \$26.67 per ton for concentrates; for that the plaintiff introduced no evidence whatever of the metallic contents of ore shipped from the ground in controversy, and offered no reason for failure to introduce such evidence, and the evidence shows that the ore from the Conkling ground, except the K-K shipments before referred to in these Assignments of Error, was mixed and sold with ore from the defendant's exclusive property, but that such mixture was in good faith, the defendant claiming title under a patent from

the United States, and the only evidence of the value of Conkling ore shipped in the year 1913, was the evidence introduced by the defendant that the metallic contents of said K-K shipments were equal to the metallic contents of any ore ever afterwards shipped from the ground in controversy, and the additional evidence furnished by the books of the smelting company, to which the ore was sold, and the books of the defendant company, showing the average monthly prices realized by the defendant from the sale of silver, lead and gold during the year 1913, which evidence shows that the average value of the tonnage shipped from the Conkling ground in controversy during the year 1913, and the prices received by the defendant for ore of the value of the K-K shipments, was for first class ore \$22.87 per ton, and \$28.43 per ton for concentrates.

Assignment of Error No. 11 (1914).

(a) The evidence is insufficient to justify the Court in finding and the Court erred in finding that 662 cars of first class
557 and 2,795 cars of second class were extracted from the ground in controversy in the year 1914; for that the Court finds in its written findings of fact that the amount of first and second class ore in the years 1914, 1915, and 1916, is to be determined by the shift boss books, and said books show that in the year 1914, there were extracted from the ground in controversy 600 cars of first class and 1,423 cars of second class ore.

(b) The evidence is insufficient to justify the Court in finding and the Court erred in finding that there were extracted from the ground in controversy in the year 1914, 1,573.53 tons of second class ore (547.31 concentrates); for that said shift boss books show that there were extracted during said time 1,423 cars of second class, which multiplied by 1,267 (the number of pounds of ore in a car of second class in the year 1914, as found by the Court in its written findings of fact), equals 902.18 tons (313.81 tons of concentrates).

(c) The evidence is insufficient to justify the Court in finding and the Court erred in finding that the defendant received for first class ore shipped during the year 1914 from the Conkling ground \$35.42; for that the plaintiff introduced no evidence whatever of the metallic contents of ores shipped from the ground in controversy, and offered no reason for failure to introduce such evidence, and the evidence shows that the ore from the Conkling ground, except the K-K shipments before referred to in these Assignments of Error, was mixed and sold with ore from the defendant's exclusive property, but that such mixture was in good faith, the defendant claiming title under a patent from the United States, and the only evidence of the value of Conkling ore shipped in the year 1914, was the evidence introduced by the defendant that the metallic contents of said K-K shipments were equal to the metallic contents of any ore ever afterwards shipped from the ground in controversy, and the additional evidence furnished by the books of the smelting company, to which the ore

was sold, and the books of the defendant Company, showing the average monthly prices realized by the defendant from the sale of silver, lead and gold during the year 1914, which evidence shows that the average value of the tonnage shipped from the Conkling ground in controversy during the year 1914, and the prices received by the defendant for ore of the value of the K-K shipments, was \$20.66 per ton for first class ore.

558

Assignment of Error No. 12 (1915).

(a) The evidence is insufficient to justify the Court in finding and the Court erred in finding that there were extracted from the ground in dispute in the year 1915, 436 tons of first class ore, or 4,400 tons of second class ore; for that the uncontradicted evidence is, and the Court finds, that the excavation made within the Conkling ground in 1915 was 42,242 cubic feet, and the uncontradicted evidence is that from this excavation at least one-half of the material was waste, leaving 21,121 cubic feet in the ground in dispute to be credited with ore. .035 of the entire number of cars taken from this excavation was first class ore, which allows 739.23 cubic feet of the excavation on the Conkling side and in the ground in dispute for first class ore in 1915, which equals 100 tons or 95 cars, and 20,381.7 cubic feet for second class ore in that year from the Conkling ground, which equals 1,978 tons or 2,597 cars of second class.

(b) The evidence is insufficient to justify the Court in finding, and the Court erred in finding that only one-seventh of the material extracted in mining in the joint property in 1915 was waste; for that the only testimony given in the case regarding the amount of waste in 1915 was given by the defendant's witnesses and they estimated it to be at least one-half of the material extracted.

(c) The evidence is insufficient to justify the Court in finding, and the Court erred in finding that the ore extracted in 1915 from the Conkling claim occupied a space 6 cubic feet per ton of first class and 7.62 cubic feet per ton for second class; for that the only evidence of the space occupied by a ton of first or second class ore in place in the Conkling ground was that contained in the report made to the Court as a result of the joint experiment hereinbefore referred, to the effect that first class ore in place occupied 7.275 cubic feet per ton and second class ore in place occupied 10.3 cubic feet per ton.

(d) The evidence is insufficient to justify the finding of the Court, and the Court erred in finding, that the defendant received \$36.77 per ton for the first class ore shipped from the Conkling ground in 1915, or \$30.25 per ton of concentrates; for that the plaintiff introduced no evidence whatever of the metallic contents of ores shipped from the ground in controversy, and offered no reason for failure to introduce such evidence, and the evidence shows that the ore from the Conkling ground, except the K-K shipments before referred to in these Assignments of Error, was mixed and sold with

ore from the defendant's exclusive property, but that such
550 mixture was in good faith, the defendant claiming title to
the 135.5 foot strip from which the ore was extracted under
a patent from the United States, and the only evidence of the value
of Conkling ore shipped in the year 1915, was the evidence introduced
by the defendant that the metallic contents of said K-K shipments
were equal to the metallic contents of any ore ever afterwards
shipped from the ground in controversy, and the additional evidence
furnished by the books of the smelting company, to which the ore
was sold, and the books of the defendant company, showing the
average monthly prices realized by the defendant from the sale of
silver, lead and gold during the year 1915, which evidence shows
that the average value of the tonnage shipped from the Conkling
ground in controversy during the year 1915, and the prices received
by the defendant for ore of the value of the K-K shipments was
\$24.48 per ton for first class ore and \$30.99 per ton for concentrates.

Assignment of Error No. 13 (1916).

(a) The evidence is insufficient to justify the Court in finding and the Court erred in finding that in the year 1916 there were extracted by the defendant from the ground in dispute 1,846.02 tons of second class ore (642 tons concentrates), for the uncontradicted evidence is that the cubic feet of material mined from within the Conkling claim from the ground in dispute was 16,410 cubic feet, and the evidence was insufficient to justify the Court in finding that only one-seventh of this material was waste, for there is no evidence whatever in the record as to the quantity of waste in 1916, except the testimony of a witness produced by the defendant, who testified that at least one-half of the material that came from the Conkling ground in this year was waste, leaving 8,205 cubic feet to be credited as second class ore; and

(b) The evidence is insufficient to justify the Court in finding and the Court erred in finding that in 1916 second class ore occupied in space 7.62, for that the only evidence of the space occupied by a ton of second class ore in place in the Conkling ground was that contained in the report made to the Court as a result of the joint experiment hereinbefore referred to, to the effect that second class ore in place occupied 10.3 cubic feet per ton. (8,205 divided by 10.3 equals 796 tons second class; 796 divided by 2.875 equals 276 tons of concentrates).

Deductions.

Assignment of Error No. 14 (1902).

The Court erred in refusing to allow defendant the expense of
cleaning out from Station 131 to Station 166 plus 13.8 feet,
560 (2,079.5) feet; for that the evidence shows without contradiction that said work was necessarily done by the defendant
in the joint property in the search for the ore, and cost the defendant

for 1,975.5 feet of the distance, \$2,474.375, and for 100 feet of the distance, \$350.00, total \$2,824.38.

Assignment of Error No. 15 (1902).

The Court erred in refusing to allow this defendant the expense of running Crescent cross-cut from Station 1155 to Station 1156 plus 22—90.5 feet; for that the uncontradicted evidence shows that said work cost the defendant \$12.00 per foot, and was an expense necessarily incurred in reaching the ore body in the ground in controversy.

Assignment of Error No. 16 (1903).

The Court erred in refusing to allow the defendant a deduction for Crescent drift from Station 166 plus 78.8 feet to Station 577 plus 6—974 feet, and for cross-cut north from Station 1177—15.5 feet, and cross-cut north from Station 663, 17 feet—(1,006.5 feet); for that the evidence shows without contradiction that said work was necessarily done in order to reach the ore body, and cost the defendant \$15.38 a foot; whereas the Court allows the defendant only 864 feet at \$15.00 a foot.

Assignment of Error No. 17 (1904).

(a) The Court erred in refusing to allow the defendant a deduction for work done in the Arthur claim, as follows: Tarbet drift from Station 568 plus 7 to Station 658 plus 11—319 feet; for that the evidence shows without dispute that said work was necessarily done in the development of the common property and in the search for the ore, and cost the defendant \$4,906.00.

(b) The Court erred in refusing to allow the defendant a deduction for 23 feet done in the Arthur claim west from Station 605; for that the evidence shows without contradiction that this work was necessarily done in prosecuting the search for the ore body, and cost the defendant \$26.18 per foot.

Assignment of Error No. 18.

The Court erred in charging the common fund with only one-half the cost of running the Alliance tunnel and tunnels branching therefrom within the limits of the Conklings claim, and refusing to charge said fund at all with the cost of that portion of the tunnel where it runs a little northerly of the north side line of the Conklings claim; for that said tunnel was run for the exclusive purpose of developing the common property, and is the means by which the ore was reached therein according to the uncontradicted evidence in the case.

Assignment of Error No. 19.

The Court erred in finding that the defendant is entitled to credit for only one-half of the cost for cleaning up the tunnel within the limits of the Arthur claim; for that said work was necessary and without it the prosecution of the work whereby the ore body was reached was impossible, according to the undisputed evidence in the case.

Assignment of Error No. 20.

The Court erred in refusing to allow the defendant any credit for the use of its improvements, machinery, tools, tramways, buildings, etc.; for that the uncontradicted evidence shows that the defendant invested in such improvements \$462,580.00, and that without said improvements none of the ore in question could have been profitably mined, milled or marketed.

Assignment of Error No. 21.

The decree in favor of the plaintiff and against the defendant is against law for the reason that the Honorable Circuit Court of Appeals for the Eighth Circuit erred in holding that the 135.5 foot strip was a part of the Conklings mining claim; for that the uncontradicted evidence in the case shows that as staked upon the ground by the locators and as monumented for patent by the United States, and as described in the patent for same, said Conklings mining claim never included any portion of the 135.5 foot strip in controversy, and the evidence shows without contradiction, and it is admitted in the case, that said 135.5 foot strip was part of a location which antedated the Conklings location, and which was afterwards conveyed by the United States to the predecessors in interest of this defendant, and ever since has been the property of this defendant, except for the judgment herein.

Assignment of Error No. 22.

The decree in favor of the plaintiff and against the defendant is against law, because the Honorable Circuit Court of Appeals for the Eighth Circuit erred in holding that the defendant did not have the right to take the ore within the Crescent vein or fissure on its dip into and beneath the surface of the Conklings mining claim; for that the undisputed evidence shows that all the ore in controversy was taken from within the Crescent lode or vein, and that the said lode or vein on its course and strike through the earth and at its apex crossed the respective side line of the Brave Columbia, Constitution, Cumberland and Monroe Doctrine mining claims belonging to this defendant, and that said vein was the discovery vein of said claim and is the only vein or lode in the said, or any of the said claims.

Assignment of Error No. 23.

The decree in favor of the plaintiff and against the defendant is against law because the District Court considered and decided the facts upon the hypothesis that the burden was upon the defendant corporation to prove the quantity of ore extracted, the proportion of first and second class, and the prices realized by the defendant upon the sale of the same.

Assignment of Error No. 24.

The Court erred in rendering and entering the final decree in this cause on the 27th day of March, 1918, whereby it was ordered, adjudged and decreed that the complainant should have and recover from defendant the sum of \$542,222.58 together with costs, because;

(a) It is shown and made to appear from the evidence in said cause that in the year 1902 the defendant necessarily expended in development work in and upon the common property in the search for the ore bodies the sum of \$3,910.38; in the year 1903 the sum of \$18,840.50; in the year 1904 the sum of \$21,266.93; in the year 1905 the sum of \$8,106.25; in the year 1906 the sum of \$3,912.00; and the sum of \$1,680.00 in 1907 prior to May 1st; making a total of \$57,716.06 principal and \$11,318.53 interest calculated to May 1st, 1907, (total expenditure and interest to May 1st, 1907, \$69,034.59).

(b) It is shown and made to appear from the evidence that no ore was mined from the Conkling ground prior to May 1st, 1907, and that May 1st, 1907, to December 31st, 1907, the defendant mined from the Conkling claim not more than 2,712.15 tons of shipping ore and 1,008 tons of concentrates and 258.9 tons of slime; that the defendant realized for 659.15 tons of shipping ore and 252.06 tons of concentrates (heretofore referred to as the K-K shipments) the sum of \$31,918.87, and for the rest of the shipping ore and concentrates during said period \$78,600.24, and for said slime \$986.44, total \$111,505.55; and that the expense chargeable to ore mined in the Conkling ground in 1907 for mining, milling, tramming, sampling and development expenditure was \$31,106.05.

563 (c) It is shown and made to appear from the evidence in said cause that there were mined from the Conkling ground during the year 1908, 397.5 tons of shipping ore, 976.8 tons of concentrates, and that the value of the shipping ore was \$20.26 per ton, and of the concentrates \$25.68 per ton; and that the defendant sold as a result of its milling operations of said ores 223.9 tons of slime at \$2.67 per ton, total \$33,705.55;—and that the expense chargeable to the ore mined in the Conkling ground during 1908 for mining, milling, tramming, sampling and development expenditure was \$22,254.97.

(d) It is shown and made to appear from the evidence in said cause that the ore mined from the Conkling ground during the year 1909 was 1,000.7 tons of shipping ore and 2,715.1 tons of concentrates; that the value of the shipping ore was \$21.73 per ton and the value of the concentrates \$27.12, total \$95,386.79;—that the necessary cost of mining, milling, tramming, sampling and development expenditure for said year was \$50,681.09.

(e) It is shown and made to appear from the evidence in said cause that there was mined from the Conkling ground for six months of 1910 298.2 tons of shipping ore and 862 tons of concentrates, and that the value thereof was \$22.10 per ton for the shipping ore and \$27.63 per ton for the concentrates, total \$30,407.46;—and that the expense of mining, milling, tramming and sampling was \$15,703.99.

(f) It is shown and made to appear from the evidence in said cause that no work was done in the Conkling ground from June 30, 1910, to April 1, 1913, but that from April, 1913, to December 31, 1913, there were extracted 85.24 tons of shipping ore and 46.2 tons of concentrates, and that the value of the shipping ore was \$22.87 per ton and the value of the concentrates \$28.43 per ton, total \$3,263.83;—And that the cost of mining, milling, tramming, sampling and development expenditure in this year was \$3,126.86.

(g) It is shown and made to appear from the evidence in said cause that during the calendar year 1914 defendant mined and extracted from the Conkling claim 618.9 tons of first class ore and 313.81 tons of concentrates, and that the value of the first class ore was \$20.66 per ton and the value of the concentrates \$25.53 per ton, total \$20,804.96;—and that the necessary expense for mining, milling, tramming, sampling and development expenditure for this year in the Conkling ground was \$14,690.98.

(h) It is shown and made to appear from the evidence in the cause that during the calendar year 1915 the defendant
564 mined from the Conkling ground 100 tons of first class ore and 1,978 tons of second class ore, which equaled at the stipulated ratio of concentration 688 tons of concentrates, and that the value of the first class ore was \$24.48 per ton and the value of said concentrates \$31.00 per ton, total \$23,776.00;—and that the necessary cost of development expenditure within the Conkling claim in this year and the cost of mining, milling, tramming and sampling was \$13,936.55.

(i) It is shown and made to appear from the evidence in said cause that the ore mined from the Conkling ground in January, February and March, 1916, (end of accounting period) was all second class and taken from the excavation which equalled 8,205 cubic feet, which divided by 10.3 equalled 796 tons of second class ore, or at the agreed ratio of concentration 276 tons of concentrates, and the value thereof was \$42.88 per ton or \$11,834.88;—and that the necessary expense of mining, milling, tramming, sampling and

development expenditure within the Conkling ground in the year 1916 was \$5,723.79.

(j) It is shown and made to appear from the evidence in said cause that the defendant necessarily expended in sinking a shaft or winze to take out ore from the joint property below the 500 level the sum of \$11,000.00.

(k) It is shown and made to appear from the evidence in said cause that the defendant necessarily expended for mine buildings, machinery, blacksmith shop, carpenter shop, sampler building, tramway, coal bin, terminals, fire system, mill buildings, mill machine shop, and other necessary equipment, the sum of \$462,588.00, all of which equipment was necessary to the mining, extraction, treatment and marketing of the ores from the Conkling ground, and that 8% per annum on the above expenditure ought to be charged against all ore mined and milled (except its shipping ore should not be charged with interest on mill expenditure), and that against the shipping ore from the Conkling claim there should be charged as interest on said investment \$2,518.54, and against the milling ore \$17,351.37, a total of \$19,869.91.

(l) It is shown and made to appear from the evidence in said cause that the defendant's total receipts from ore extracted from the Conkling claim during the period of the accounting was only \$330,-685.02, that its total necessary expenditures in developing, mining, extracting, shipping, milling and selling said ore was \$245,-565 813.25, and that the complainant is the owner of a three-fourths' interest in the Conkling mining claim.

Wherefore This defendant prays that said decree of the District Court be reversed and said District Court be directed to enter a decree herein dismissing complainant's bill and awarding to this defendant its costs in said District Court and upon this appeal.

W. H. DICKSON,
THOMAS MARIONEUX,
A. C. ELLIS,
R. G. LUCAS,

Solicitors for Defendant.

W. H. DICKSON,
Of Counsel.

Endorsed: Filed in the District Court on April 19, 1918.

We acknowledge receipt of copy of the foregoing Assignments of Errors this 16th day of April, 1918, and we expressly stipulate and agree that the defendant may at any time within two weeks from this date file any additional assignments of error or amendments to the foregoing assignments, as it may be advised.

PIERCE, CRITCHLOW &
BARRETTE,
Solicitors for Complainant.

(Order Allowing Appeal of Silver King Coalition Mines Company.)

On motion of Thomas Marioneaux, one of the solicitors for defendant, Silver King Coalition Mines Company, it is ordered that an appeal to the United States Circuit Court of Appeals for the Eighth Circuit from the final decree heretofore filed and entered herein be, and the same hereby is, allowed, and that a certified transcript of the record, testimony, exhibits, stipulations and all proceedings herein be forthwith transmitted to said United States Circuit Court of Appeals.

It is further ordered that the bond on appeal be fixed at the sum of Seven Hundred Thousand (\$700,000.00) Dollars, the same to serve as a supersedeas bond, and also as a bond for costs and damages on appeal.

Dated April 17th, 1918.

TILLMAN D. JOHNSON,
*United States District Judge for the
District of Utah, Presiding in said Court.*

Endorsed: Filed in the District Court on April 17, 1918.

(Supersedeas Bond on Appeal of the Silver King Coalition Mines Company.)

Know All Men by these Presents, That we, Silver King Coalition Mines Company, a corporation as principal, and W. S. McCormick, Lawrence Greene, F. D. Kimball and L. B. McCormick, all of Salt Lake City, Utah, as sureties, are held and firmly bound unto Conkling Mining Company, a corporation, in the following penal sums, to-wit:

The said principal, Silver King Coalition Mines Company, in the sum of Seven Hundred Thousand (\$700,000.00) Dollars; and the said sureties in the following penal sums respectively, to wit: in said sum of seven hundred thousand dollars to be paid to the said Conkling Mining Company, its successors or assigns, for which payment well and truly to be made we bind ourselves, our successors and assigns, and our heirs, executors and administrators, jointly and severally by these presents.

Sealed with our seal and dated the 30th day of April, in the year of our Lord, 1918.

Whereas, on the 27th day of March, 1918, in the District Court of the United States in and for the District of Utah, in a suit pending in that court between said Conkling Mining Company, plaintiff, and said Silver King Coalition Mines Company, defendant, a decree was rendered in favor of the said Conkling Mining Company and against the said Silver King Coalition Mines Company, and the latter Company having obtained the allowance of an appeal by order of said District Court, to reverse the decree in said suit and a citation directed to the said Conkling Mining Company, citing and admonish-

ing it to be and appear in the United States Circuit Court of Appeals for the Eighth Circuit, at the City of St. Louis, Mo., sixty days from and after the date of said citation;

567 Now, the condition of the above obligation is such that if the said Silver King Coalition Mines Company shall prosecute said appeal to effect, and answer all damages and costs, if it fail to make good its plea, then the above obligation to be void, else to remain in full force and virtue.

In Witness Whereof, the said above bounden principal has caused these presents to be executed in its corporate name, and its corporate seal to be affixed, and the said sureties have hereunto set their hands and seals the day and year first above written.

[Corporate Seal of Co.]

SILVER KING COALITION MINES
COMPANY A CORPORATION,
By THOMAS KEARNS,
President.

W. S. McCORMICK.
LAWRENCE GREENE.
F. D. KIMBALL.
L. B. McCORMICK.

F. J. WESTCOTT,
Secretary.

Approved:

TILLMAN D. JOHNSON,
Judge.

Endorsed: Filed in the District Court on May 1, 1918.

The foregoing bond may be approved 5/1/18. E. B. Critchlow.

(Order Enlarging Time to File Transcript.)

Good cause appearing therefor, it is hereby ordered that the defendant and appellant above-named be and is hereby given and allowed until July 1, 1918, to docket this case, and file the record thereof with the Clerk of the Circuit Court of Appeals.

Signed in duplicate this 15th day of May, 1918.

By the Court:

TILLMAN D. JOHNSON,
Judge.

Endorsed: Filed in the District Court on May 16, 1918.

(Stipulation for the Transmission of Certain Original Exhibits to the U. S. Circuit Court of Appeals.)

It is hereby stipulated between the parties to the above entitled suit by their respective counsel, that the Clerk of this Court shall forward to the Circuit Court of Appeals to be used upon the appeal from the decree made and entered herein in favor of the plaintiff, the following original exhibits, namely:

Exhibits 1 to 20 inclusive, being maps.

Exhibit 24, a map.

Exhibit 45, a map.

Exhibit 85, a map.

Exhibit 41, Shift Boss book.

Exhibit 42, Book for March, 1914.

Exhibit 43, Book for April, 1914.

Exhibit 44, Book for May, 1914.

Exhibit 53 Ore Sales Book.

Exhibit 59, sample of ore by Brooks.

Exhibit 60, same.

Exhibit 61, same.

Exhibit 62, same.

Exhibit 63, same.

Exhibit 68, extract from ore sales book—June 7, 1907, to 1916.

Exhibit 69—Tabulation of ore shipments in 1907, January to May.

Exhibit 70, K-K ore book.

Exhibit 71—Settlement for Lot 1, crude K-K mining Company, May 8, 1907.

Exhibit 72—same for Lot 2.

Exhibit 73—same for Lot 3.

Exhibit 74—same for Lot 4.

Exhibit 75—same for Lot 1 concentrates.

Exhibit 76—same for Lot 2 concentrates.

Exhibit 86—Tabulation showing tonnage, etc., for October, November and December, 1906.

Exhibit 87—similar tabulation.

569 Exhibit 90—tabulation showing tonnage.

Exhibit 94—shift boss book.

Exhibit 109—specimen of ore.

Exhibit 118—sheets from ore book.

Exhibit 119—same.

Exhibit 120—same.

Exhibit 121—same.

Exhibit 122—same.

Exhibits 123 to 139, ore extraction books.

It is also further stipulated that said exhibits, being in the possession of the Clerk of this Court, shall be deemed to be sufficiently authenticated by the fact of being received from his custody, and

they shall be deemed part of the statement of the evidence in this case, with the same effect as if physically attached to the statement of the evidence, certified and approved by the Judge of this Court.

E. B. CRITCHLOW,
WM. W. RAY,
W. D. McHUGH,
Solicitors for Complainant.
W. H. DICKSON,
A. C. ELLIS,
T. MARIONEUX,
Solicitors for Defendant.

Dated June 19, 1918.

Endorsed: Filed in the District Court on June 19, 1918.

(Præcipe of the Silver King Coalition Mines Company for Transcript.)

To the clerk of the above-named Court:

The Clerk of the above-named Court will please prepare and forward to the United States Circuit Court of Appeals for the Eighth Circuit, a typewritten transcript in the above entitled cause and include therein the following:

1. Second amended bill of complaint.
2. Answer to second amended bill of complaint.
3. Statement of the evidence and proceedings in the taking of the account, and subsequent thereto, together with the exhibits
570 attached, approved and certified this 19th day of June, 1918, by the Court.
4. Also the following original exhibits, pursuant to a stipulation this day made and filed, namely:

Exhibits 1 to 20 inclusive, being maps.

Exhibit 24, a map.

Exhibit 45, a map.

Exhibit 85, a map.

Exhibit 41, Shift Boss book.

Exhibit 42, Book for March, 1914.

Exhibit 43, Book for April, 1914.

Exhibit 44, Book for May, 1914.

Exhibit 53, Ore book.

Exhibit 59, sample of ore by Brooks.

Exhibit 60, same.

Exhibit 61, same.

Exhibit 62, same.

Exhibit 63, same.

Exhibit 68, extract from ore sales book—June 7, 1907, to 1916.

Exhibit 69, Tabulation of ore shipments in 1907, January to May.

Exhibit 70, K-K ore book.

Exhibit 71, Settlement sheet for Lot 1, crude K-K Mining Company, May 8, 1907.

Exhibit 72, Same for Lot 2.

Exhibit 73, same for Lot 3.

Exhibit 74, Same for Lot 4.

Exhibit 75, Same for Lot 1 concentrates.

Exhibit 76, Same for Lot 2 concentrates.

Exhibit 86, Tabulation showing tonnage, etc., for October, November and December, 1906.

Exhibit 87, Similar tabulation.

571 Exhibit 90, Tabulation showing tonnage.

Exhibit 94, Shift Boss book.

Exhibit 109, Specimen of ore.

Exhibit 118, Sheets from ore book.

Exhibit 119, Same.

Exhibit 120, Same.

Exhibit 121, Same.

Exhibit 122, Same.

Exhibits 123 to 139, ore extraction books.

5. Order of the Court extending the time allowed appellant for filing the record and docketing the appeal in the Circuit Court.

6. Order of the Court.

7. Stipulation of parties that opinion of Court may be made part of the record, dated April 18, 1918.

8. Order made on above stipulation making opinion part of record

9. Petition for appeal.

10. Assignment of [Errors].

11. Order allowing appeal and fixing bond.

12. Citation.

13. Stipulation of this date as to original exhibits.

14. Precipe.

W. H. DICKSON,

A. C. ELLIS,

T. MARIONEUX,

Solicitors for Appellant.

Copy received — day of June, 1918.

E. B. CRITCHLOW,

WM. W. RAY,

WM. D. McHUGH,

WM. J. BARRETTE,

Solicitors for Respondent.

Endorsed: Filed in the District Court on June 19, 1918.

572 (*Supplemental Præcipe of Silver King Coalition Mines Company for Transcript.*)

To the clerk of the above-named court:

You will please include in the papers forwarded to the Circuit Court of Appeals on the appeal of the Silver King Coalition Mines Company, in addition to the exhibits called for by the præcipe, the following:

1. Affidavit of N. Treweek, filed herein June 1, 1908, in support of motion for leave to inspect and survey.

2. Order granting leave to inspect and survey made June 30, 1908.

W. H. DICKSON,
A. C. ELLIS,
T. MARIONEUX,
Solicitors for Appellant,
Silver King Coalition Mines Company.

Service of copy of above supplemental præcipe admitted this 20th day of June, 1918.

EDWARD B. CRITCHLOW &
WM. W. RAY,
Solicitors for Conkling Mining Company.

Endorsed: Filed in the District Court on June 20, 1918.

(*Amended Præcipe of the Silver King Coalition Mines Company for Transcript.*)

To the clerk of the above-named court:

Please strike out from the præcipe herewith served [upon] you, the following: Exhibit 68 because the same is already attached to the statement of the evidence. Exhibit 85, because the said map is already attached to [the] statement of evidence. Exhibit 94, shift boss book, and Exhibits 123 to 139, ore books, the contents of the same having already been tabulated and stated in the certified statement of the evidence.

W. H. DICKSON,
A. C. ELLIS,
T. MARIONEUX,
Solicitors for Appellant,
Silver King Coalition Mines Co.

573 Service of a copy of the foregoing amended præcipe served on us this 21st day of June, 1918; and our stipulation in

respect to the original exhibits to be sent up by the Clerk may be deemed to be amended to conform to the præcipe as amended.

EDWARD B. CRITCHLOW &
WM. W. RAY,

Solicitors for Conkling Mining Company.

Endorsed: Filed in the District Court on June 22, 1918.

(Citation on Appeal of the Silver King Coalition Mines Company and Admission of Service.)

No. 2125. Equity.

CONKLING MINING COMPANY, a Corporation, Plaintiff,

VS.

SILVER KING COALITION MINES COMPANY, a Corporation, Defendant.

The United States of America to Conkling Mining Company and its Solicitors, William H. King, E. B. Critchlow, W. J. Barrette, and William D. McHugh, Greeting:

You are hereby notified that in a certain case in equity in the United States District Court in and for the District of Utah, wherein Conkling Mining Company is complainant, and Silver King Coalition Mines Company, is defendant, an appeal has been allowed the defendant therein to the United States Circuit Court of Appeals for the Eighth Circuit.

You are hereby cited and admonished to be and appear in said Court at St. Louis, Missouri, sixty days after the date of this citation to show cause, if any there be, why the order and decree appealed from should not be corrected, and speedy justice done the party in that behalf.

Witness the Honorable Tillman D. Johnson, Judge of the United States District Court in and for the District of Utah, this 17th day of April, A. D. 1918.

TILLMAN D. JOHNSON,
United States District Judge.

Attest:

JOHN W. CHRISTY,
Clerk.

574 Due service of the foregoing Citation admitted this 17th day of April, 1918.

PIERCE, CRITCHLOW & BARRETTE &
WM. W. RAY,
Solicitors for Appellee.

Endorsed: Lodged in Clerk's Office April 17, 1918, John W. Christy, Clerk.

(Clerk's Certificate to Transcript.)

UNITED STATES OF AMERICA,
District of Utah, ss:

I, John W. Christy, Clerk of the District Court of the United States for the District of Utah, do hereby certify that the foregoing pages numbered from one to seven hundred and thirty-seven, both inclusive, and including pages 680 $\frac{1}{4}$ and 680 $\frac{1}{2}$, contain a full, true and complete copy and transcript of the record, proceedings and papers called for in the praecipes for said transcript filed in that certain suit in equity No. 2125 on the dockets of this Court, wherein Conkling Mining Company is plaintiff and Silver King Coalition Mines Company, a corporation, is defendant, as full, true and complete as the originals thereof now remain on file and of record in my office, the following papers and proceedings being omitted because not specified in said praecipes, to-wit:

Jan	8, 1908	Bill in equity
	9, 1908	Subpoena in equity and return
	30	Appearance of Silver King Coalition Mines Co by solicitors
Mar	3 1908	Stipulation giving deft to April rule day to answer
	5 1908	Separate answer of deft. Daugherty
	16 1908	Alias subpoena and return.
Apl	6 1908	Order giving deft Co to April 13, 1908 to answer
	11 1908	Answer Silver King Coalition Mines Co.
Jun	1 1908	Stipulation as to motion to strike and replication
		Order or leave to file motion and time for reply
		Motion to strike and exceptions
		Motion for leave to inspect and for survey
	22, 1908	Order continuing motion for survey
	29 1908	Order submission motion to strike
Jul	3 1908	Order overruling motion to strike
	6	Replication of complainant
Sep	28	Stipulation extending time for taking testimony
		Order extending time as per stipulation
Nov	30	Stipulation of manner and time taking testimony
		Order on said stipulation
Feb	1 1909	Stipulation of facts and substitution party plaintiff
		Order substitution party plaintiff
	18	Supplemental bill
575		Motion for receiver and injunction and affidavits of Anderson and Treweek in support
Mar	1	Order said motion set for hearing
	13	Stipulation extending time of hearing
	15	Stipulation extending time of hearing motion
Mar	20, 1909	Stipulation to continue hearing motion
	22	Order continuing hearing
Jun	8	Notice of motion to file amended and suppld bill
	17	Order continuing hearing said motion

- 21 Order hearing motion to file Amd & Supp bill, submitted
- 28 Order denying motion to file amended and suppld bill
- 29 Opinion of Court on foregoing order
Order setting time to hear motion to file amended bill
Notice of Motion to file amended bill
Order of hearing above set for day certain
- Jul 5 1909 Order granting leave to file amended bill
- Aug 3 Answer to second amended bill
- May 7 1910 Stipulation as to trial and reference
- Sep 21 Notice of motion to set for trial
- Oct 10 Order set for trial October 24, 1910
- Nov 7 Order set for trial January 23, 1911
- Jan 2 1911 Dey & Hoppaugh withdraw as solicitors
Stipulation as to C. C. Dey and Ogden Hiles solicitors
Order cause set for trial June 23, 1911
- 8 1912 Subpoena for witness and [return]
- 12 Affidavits for a continuance
- 15 Order trial begun
- 30, 31, Feb. 1, 2, 5, 6, 7, 8, 1912. Entries of trial resumed
- Feb 9 1912 Entry trial concluded and submitted and under advisement
- Jul 15 Opening of Court directing decree for defendant.
- Aug 5 Decree dismissing case
- 6 Cost bill of debt.
- Jan 6 1913 Taxation of costs by Clerk
- 10 Order fixing bond on appeal
- 13 Transcript of testimony and evidence settled as statement of evidence, 2 volumes.
- Petition for appeal
- Assignment of errors
- Order allowing appeal
- Feb 14 Bond on appeal
- Notice in re testimony in condensed form
- Mar 10 Stipulation as to statement of evidence
- Order on same
- 11 Stipulation extending time for record
- Order on same
- 24 Proposed amendments to condensed statement evidence
- Apl 10 Stipulation as to transcript record
- Nunc pro tunc order on said stipulation
- 12 Order extending time for transcript
- 18 Stipulation in re exhibits
- 21 Condensed statement of evidence
- Præcipe for transcript of record
- 576
- Nov 3 1916 Mandates U S Circuit Court Appeals and of U. S. Supreme Ct.
- 13 Motion of plaintiff for interlocutor- decree

- 16 Stipulation giving deft time for brief
 Dec 16 1916 Motion of defendant to reopen case and three affidavits in support omitted but I certify that true and correct copies thereof appear in the Condensed statement of [evid] evidence filed June 19, 1918
 Notice of said motion
 Order setting hearing of said motion
 22 Motion of defendant to reopen case
 23 Order setting hearing above motion
 30 Motion for decree on mandate
 Entry taking under advisement motion to re-open
 Jan 5 1917 Order setting hearing motion for decree
 20 Order denying motion to re-open etc.
 20 Decree on Mandate omitted but I certify that a true and correct copy thereof appears in Condensed statement of evidence filed June 19, 1918.
 Mar 1 Statement of account of defendant omitted, but I certify that a true and correct copy thereof appears in Condensed statement of evidence filed June 19, [19] 1918.
 Apl 7 Order setting for trial
 Numerous subpoenas for witnesses omitted.
 May 14 Appearance W. W. Ray as solicitor for Plaintiff entered
 Amended account of defendant omitted, but I certify that a true and correct copy thereof appears in the aforementioned Condensed statement of evidence.
 Entry of beginning of trial and entries of trial resumed on various intervening dates to June 13,
 Jun 14 1917 Entry trial concluded and submitted Time for briefs.
 25 Stipulation as to exhibits
 Aug 24 Stipulation in re briefs
 Sep 1 Stipulation in re briefs
 8 Stipulation in re briefs
 10 Order extending time for briefs
 12 Order as to reply brief
 18 Notice of intention to apply to file amended and final account and to take further testimony
 22 Motion to file amended final account and take further testimony, affidavit of Thomas Marioneaux, Proposed final account, affidavits of J. B. Schofield, William Reid and Wm. H. Dickson in support thereof omitted, but I certify that true and correct copies thereof appear in aforementioned Condensed statement of the evidence filed June 18, 1918
 Order hearing and allowance of filing of amended acc't
 Mch 12 1917 Notice of filing of statement for decree by plaintiff
 Statement of amount claimed by plaintiff omitted but I certify that a true and correct copy thereof

	appears in said Condensed statement of the evidence.
16	Order setting hearing for settlement decree
18	Order giving time to deft to object to decree
21	Notice of objections to proposed decree
	Schedule accompanying said objections
26	Notice of plaintiff to deft as to decree
28	Cost bill of plaintiff
577	Taxation of costs by Clerk
Jun 8	Notice of calling up statement of evidence by deft
17	Affidavit of Thomas Marionaux in re statement
	Notice by defendant of appeal

I further certify that pursuant to the stipulations and order of this Court herein, I herewith transmit certain original exhibits offered and received in evidence and used upon the trial of this cause, as follows, to-wit:

- Exhibits 1 to 20 both inclusive, being maps
- Exhibits 24, 45 and 85, being maps
- Exhibit 41, Shift Boss Book
- Exhibit 42 Book for March 1 1914
- Exhibit 43 Book for April 1914
- Exhibit 44, Book for May 1914
- Exhibit 53 Ore Book
- Exhibits 59, 60, 61, 62, 63 and 100, being samples of rock
- Exhibit 68 Extract from ore sales book, Jun- 7, 1908 to 1916.
- Exhibit 69 Tabulation of ore shipments in 1907, January to May
- Exhibit 70 K-K ore book
- Exhibit 71 Settlement sheet for lot 1 Crude K-K Mining Co,
- May 8/07
- Exhibit 72 Same for lot 2
- Exhibit 73 Same for lot 3,
- Exhibit 74 Same for lot 4
- Exhibit 75 Same for lot 1 concentrates
- Exhibit 76 Same for lot 2 concentrates
- Exhibit 86 Tabulation showing tonnage etc for October, Novr
- & Decr /06
- Exhibit 87 Similar tabulation
- Exhibit 90 Tabulation showing tonnage
- Exhibit 94 Shift Boss Book
- Exhibit 118 Sheets from ore book
- Exhibit 119 Sheets from ore book
- Exhibit 120 Same
- Exhibit 121 Same
- Exhibit 122 Same

the same being transmitted in separate packages by express.

I further certify that the original citation in this cause is herewith annexed and transmitted herewith.

In Witness Whereof, I have hereunto set my hand and affixed the seal of said Court, at Salt Lake City, in said district, this twenty-second day of June, in the year of our Lord one thousand nine hundred and eighteen and the one hundred and forty-second year of the Independence of the United States of America.

[Seal U. S. Dist. Court, Dist. of Utah.]

JOHN W. CHRISTY,
*Clerk United States District Court,
District of Utah.*

Filed Jun. 26, 1918. E. E. Koch, Clerk.

578 UNITED STATES OF AMERICA,
District of Utah, ss:

At a regular stated term of the District Court of the United States for the District of Utah in the Central Division thereof, begun and held in the Court room in the Federal Building at Salt Lake City, on the 8th day of April, in the year of our Lord one thousand nine hundred and eighteen and the one hundred and forty second year of the Independence of the United States of America.

Present: Honorable Tilman D. Johnson, United States District Judge for the District of Utah.

TRANSCRIPT OF THE RECORD ON CROSS-APPEAL OF COMPLAINANT.

In Equity.

No. 2125 (307).

CONKLING MINING COMPANY, a Corporation, Plaintiff,

vs.

SILVER KING COALITION MINES COMPANY, a Corporation, Defendant.

(Petition for and Order Allowing Appeal of the Conkling Mining Company.)

To the Honorable Tillman D. Johnson, District Judge:

The above named complainant, feeling itself aggrieved by the decree made and entered in this cause on the 27th day of March, 1918, does hereby appeal from said decree to the Circuit Court of Appeals for the Eighth Circuit, for the reasons specified in the Assignment of Errors filed herewith, and it prays that its appeal be allowed, and that citation issue as provided by law, and that a transcript of the record, proceedings and papers upon which said decree was based, duly authenticated, may be sent to the United States Circuit Court of Appeals for the Eighth Circuit, sitting at St. Louis, Missouri.

And your petitioner further prays that the proper order touching the security to be required of it to perfect its appeal, be made.

EDWARD B. CRITCHLOW,

WM. W. RAY,

WM. D. McHUGH,

WM. J. BARRETTE,

Solicitors for Complainant.

579 The above petition is hereby granted and the appeal allowed upon giving bond conditioned as required by law in the sum of \$500.

Dated Salt Lake City, Utah, June 19th, 1918.

TILLMAN D. JOHNSON,

Judge.

Endorsed: Filed in the District Court on June 19, 1918.

(Assignment of Errors on the Appeal of the Conkling Mining Company.)

Now comes Conkling Mining Company, a corporation, complainant above named, and makes and files the following assignment of errors upon which it will rely upon its appeal from the decree made and entered by this Honorable court in the above entitled suit, on March 27, 1918.

1. The court erred in not making and entering a decree in said suit that complainant recover from defendant, the sum of at least Nine Hundred Fifteen Thousand, Nine Hundred Twenty Seven and 23/100 (\$915,927.23) Dollars, with interest the same being three-fourths of the total net amount of One Million, Two Hundred Twenty One Thousand, Two Hundred Thirty Six and 31/100 (\$1,221,236.31) Dollars, yielded from the ore extracted by defendant from the joint property of the parties hereto, and the interest thereon, calculated on three-fourths of the various sums aggregating said amount, and for the periods as follows:

From December 31, 1907 on	\$236,163.56
" December 31, 1908 "	185,501.78
" December 31, 1909 "	408,817.25
" July 1, 1910 "	87,750.64
" December 31, 1913 "	22,837.64
" December 31, 1914 "	57,023.96
" December 31, 1915 "	157,075.57
" March 31, 1916 "	66,065.91
Total	\$1,221,236.31

2. The court erred in making and entering a decree in the above entitled suit in favor of the complainant, and against the defendant, that complainant recover of the defendant, the sum of Five Hundred

Forty Two Thousand, Two Hundred Twenty Two and 58/100 (\$542,222.58) Dollars only, and in not rendering and entering a decree in favor of the complainant and against the defendant, that the complainant recover of the defendant, the sum of Nine Hundred Fifty Eight Thousand, Nine Hundred Twenty Seven and 23/100 (\$915,927.23) Dollars, with interest, upon the following basis, and including the following items, to-wit:

(a) Three-fourths of the value of the total amount of first-class ores and of concentrates mined and taken from the joint property in the several years from 1907 to 1916 inclusive, as follows, to-wit:

1907—4,466.66 tons first-class ore—1,140.9	tons concentrates
1908—3,093.33 “ “ “ “ —2,435.96	“ “
1909—7,449.6 “ “ “ “ —2,039.9	“ “
1910—2,096.8 “ “ “ “ — 574.3	“ “
1913— 321.8 “ “ “ “ — 88.1	“ “
1914—1,303.3 “ “ “ “ — 356.8	“ “
1915—3,183.9 “ “ “ “ — 872.	“ “
1916—1,172.1 “ “ “ “ — 321.	“ “

(b) Three-fourths of the value of the ores mined and taken by the defendant from the joint property of the parties during the several years hereinafter named, computing said value for the various years, and for the two classes of ore mined and taken at the price per ton, as follows, to-wit:

	First class.	Concentrates.
1907	\$46.63	\$61.97
1908	53.39	44.55
1909	48.28	44.63
1910	36.77	38.91
1913	65.47	40.52
1914	41.29	29.59
1915	44.31	38.88
1916	49.23	46.59

3. The court erred in fixing as the price or value of the ores taken and mined by the defendant from the joint property of the parties, a price or value based upon the average price received by the defendant for its ores coming from the entire mine of defendant during the years respectively, when ores were mined from the said joint property, and in not taking and computing the value of said ores and concentrates at the highest average price received for ores in any month during the years in question respectively.

4. The court erred in allowing to the defendant, as a charge for the smelting of said ores extracted from the joint property of the parties hereto, the amount provided for in the contract between defendant and Miners Smelting Company, Exhibit #107.

581 5. The court erred in allowing to the defendant as an expense to be deducted from the net value of the ores extracted from the joint property, the sum of Twenty Nine Thousand, Seven Hundred Five and 86/100 (\$29,705.86) Dollars, being the amount with interest of alleged expenditures in and from the Alliance Tunnel prior to January 1, 1907.

6. The court erred in allowing to the defendant the cost of cleaning out and driving the Alliance Tunnel to the beginning of the McKay cross-cut, and in not offsetting whatever cost defendant was put to in this respect, as against the value of the separate use by the defendant of said tunnel, and the revenue derived by the defendant from the water developed by the defendant in said tunnel.

EDWARD B. CRITCHLOW,
WM. W. RAY,
WM. D. McHUGH
WM. J. BARRETTE,
*Solicitors for Complainant,
Conkling Mining Company.*

Service of the foregoing assignments of error admitted this 19 day of June, 1918.

W. H. DICKSON,
A. C. ELLIS,
T. MARIONEUX,
Solicitors for Defendant.

Endorsed: Filed in the District Court on June 19, 1918.

(Bond on Appeal of the Conkling Mining Company.)

Know All Men by These Presents: That we, the Conkling Mining Company, a corporation, and J. H. Walker and L. H. Farnsworth, all of Salt Lake City, Utah, are held and firmly bound unto Silver King Coalition Mines Company, in the full and just sum of Five Hundred (\$500) Dollars, to be paid to the said Silver King Coalition Mines Company, its successors or assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors or assigns, jointly and severally by these presents. Sealed with our seals and dated this 19th day of June, in the year of our Lord, One Thousand Nine Hundred and Eighteen.

Whereas lately at a term of the District Court of the United States, Eighth Circuit, and for the District of Utah, in a suit depending in the said court between the Conkling Mining Company, complainant, and Silver King Coalition Mines Company, defendant, a decree was rendered against the Silver King Coalition Mines Company, and the Conkling Mining Company has obtained an allowance of an appeal to the said court to reverse the decree in the aforesaid suit, and a citation directed to the said Silver King Coalition Mines Company citing and admonishing it to be and appear in the United States Circuit Court of Appeals for the Eighth

Circuit, at the City of St. Louis, Missouri, sixty days from the date of said citation.

Now the condition of the above obligation is such that if the said Conkling Mining Company shall prosecute said appeal to effect, and answer all damages and costs, if it fail to make good its plea, then the above obligation to be void, else to remain in full force and virtue.

[Corporate Seal.]

CONKLING MINING COMPANY,
By E. B. CRITCHLOW,
Its President.
L. H. FARNSWORTH. [SEAL.]
J. H. WALKER. [SEAL.]

Sealed and delivered in the presence of
E. O. HOWARD.

Approved June 19th, 1918.
TILLMAN D. JOHNSON,
District Judge.

Endorsed: Filed in the District Court on June 19, 1918.

(Præcipe of the Conkling Mining Company for Transcript.)

To the clerk of U. S. District Court:

Upon the cross appeal taken by Conkling Mining Company in the above entitled cause, please certify to the Circuit Court of Appeals at St. Louis, Missouri, the following papers:

1. Petition for allowance of appeal.
2. Order allowing appeal.
3. Assignment of Errors.
4. Citation and proof of service.
- 583 5. Bond on appeal and approval.
6. Minute entries pertaining to appeal.

All records and proceedings and exhibits other than those above specified necessary for use upon this cross appeal have already been sent or directed to be sent up by you upon the appeal of Silver King Coalition Mines Company herein.

June 20, 1918.

EDWARD B. CRITCHLOW,
WM. W. RAY,
WM. D. McHUGH,
WM. J. BARRETTE,
Solicitors for Conkling Mining Company.

Endorsed: Filed in the District Court on July 20, 1918.

(Citation on Appeal of the Conkling Mining Company and Acceptance of Service.)

CONKLING MINING COMPANY, a Corporation, Plaintiff,

vs.

SILVER KING COALITION MINES COMPANY, a Corporation, Defendant.

United States of America to Silver King Coalition Mines Company,
Greeting:

You are hereby cited and admonished to be and appear in the United States Circuit Court of Appeals for the Eighth Circuit, at the City of St Louis, Missouri, sixty days from and after the day this citation bears date, pursuant to an appeal allowed and filed in the Clerk's Office of the United States District Court, Eighth Circuit, in and for the District of Utah, wherein Conkling Mining Company, a corporation, is appellant, and you, respondent, to show cause, if any there be, why the decree rendered against you as defendant, as in said appeal mentioned, should not be corrected, and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable Tillman D. Johnson, Judge of the United States District Court, Eighth Circuit, in and for the District of Utah, this 19th day of June, 1918.

[Seal U. S. Dist. Court, Dist. of Utah.]

TILLMAN D. JOHNSON,
*United States District Judge in
and for the District of Utah.*

Attest:

JOHN W. CHRISTY,
Clerk.

584 Service of the above citation accepted this 19th day of
June, 1918.

W. H. DICKSON,
A. C. ELLIS,
T. MARIONEUX,
Solicitors for Defendant.

Endorsed: Lodged in Clerk's Office, June 19, 1918, John W. Christy, Clerk.

(Clerk's Certificate to Transcript.)

UNITED STATES OF AMERICA,
District of Utah, ss:

I, John W. Christy, Clerk of the District Court of the United States for the District of Utah, do hereby certify that the foregoing

transcript, comprising eight pages, contains true, full and complete copies of the petition of Conkling Mining Company on cross appeal, and order allowing same and fixing bond, assignment of errors, bond on appeal and approval of same, and præcipe for transcript of the record, in a certain cause in said Court lately depending, wherein the Conkling Mining Company is complainant and the Silver King Coalition Mines Company is defendant, as full, true and complete as the same now are and remain on file and of record in my office.

I further certify that the original citation is hereto annexed and is transmitted to said Court of Appeals as a part of said transcript of the record.

I further certify that full, true and complete copies of all the papers filed and proceedings entered of record in this cause other than those contained in this transcript of the record on cross-appeal hereto annexed, in accordance with my certificate dated June 22, 1918 to the transcript of the record on the appeal of the Silver King Coalition Mines Company, have been transmitted to the Clerk of the Circuit Court of Appeals of the United States for the Eighth Circuit at St. Louis, Missouri, for use on this said cross-appeal
585 in accordance with the præcipe of the Conkling Mining Company set forth in the foregoing transcript.

In testimony whereof, I have hereto set my hand and affixed the seal of said Court, at Salt Lake City, in said district, this 24th day of June, in the year of our Lord one thousand nine Hundred and eighteen and of the Independence of the United States of America the one hundred and forty-second year.

[Seal U. S. Dist. Court, Dist. of Utah.]

JOHN W. CHRISTY,
*Clerk United States District
Court, District of Utah.*

Filed Jun- 27, 1918. E. E. Koch, Clerk.

586 And thereafter the following proceedings were had in said causes, in the Circuit Court of Appeals, viz:

(Appearance of Counsel for Appellant in Cause No. 5188.)

United States Circuit Court of Appeals, Eighth Circuit.

No. 5188.

SILVER KING COALITION MINES COMPANY, Appellant,

vs.

CONKLING MINING COMPANY.

To the clerk of the above-named court:

Please enter the appearance of the undersigned as counsel for the appellant.

T. MARIONEUX.
W. H. DICKSON.
A. C. ELLIS, JR.
R. G. LUCAS.

Dated: June 21, 1918.

(Endorsed:) Filed in U. S. Circuit Court of Appeals, Jun. 26, 1918.

(Appearance of Counsel for Appellee in Cause No. 5188.)

The Clerk will enter my appearance as Counsel for the Appellee.
WILLIAM D. McHUGH.

(Endorsed:) Filed in U. S. Circuit Court of Appeals, Sep. 10, 1918.

(Appearance of Mr. William D. McHugh as counsel for Appellant in Cause No. 5190.)

No. 5190.

CONKLING MINING COMPANY, Appellant,

vs.

SILVER KING COALITION MINES COMPANY.

The Clerk will enter my appearance as Counsel for the Appellant
WILLIAM D. McHUGH.

(Endorsed:) Filed in U. S. Circuit Court of Appeals, Jul. 1, 1918.

(Appearance of Mr. E. B. Critchlow, Mr. William W. Ray, Mr. William J. Barrette, and Mr. William H. King, as Counsel for Appellant in Cause No. 5190.)

587 The Clerk will enter my appearance as Counsel for the Appellant.

E. B. CRITCHLOW,
Salt Lake City.
WM. D. McHUGH,
Omaha, Neb.
WM. W. RAY,
Salt Lake City.
WM. J. BARRETTE,
Salt Lake City.
WM. H. KING,
Salt Lake City.

(Endorsed:) Filed in U. S. Circuit Court of Appeals, Jul. 5, 1918.

(Appearance of Counsel for Appellee in Cause No. 5190.)

The Clerk will enter my appearance as Counsel for the Appellee.

W. H. DICKSON,
A. C. ELLIS, JR.,
A. G. LUCAS,
T. MARIONEUX,
All in Kearns Building, Salt Lake City, Utah.

(Endorsed:) Filed in U. S. Circuit Court of Appeals, Aug. 17, 1918.

(Order of Argument.)

September Term, 1918.

Wednesday, September 11, 1918.

No. 5188.

SILVER KING COALITION MINES COMPANY, Appellant,

vs.

CONKLING MINING COMPANY.

Appeal from the District Court of the United States for the District of Utah.

No. 5190.

CONKLING MINING COMPANY, Appellant,

vs.

SILVER KING COALITION MINES COMPANY.

Appeal from the District Court of the United States for the District of Utah.

588 These causes, Nos. 5188 and 5190, having been called for hearing in their regular order, and being an appeal and cross-appeal are argued as one case under the rule, the complainant below having the opening and closing of the oral argument, whereupon argument was commenced by Mr. Edward B. Critchlow in behalf of the Conkling Mining Company, continued by Mr. T. Marioneaux in behalf of the Silver King Coalition Mines Company and the hour for adjournment having arrived further argument was postponed until tomorrow.

(Order of Submission.)

September Term, 1918.

Thursday, September 12, 1918.

These causes, Nos. 5188 and 5190, having been called for further hearing, argument was continued by Mr. W. H. Dickson in behalf of the Silver King Coalition Mines Company and concluded by Mr. Edward B. Critchlow in behalf of the Conkling Mining Company.

Thereupon, these causes were submitted to the Court on the transcripts of the record from said District Court and the briefs of counsel filed herein.

(*Opinion.*)

United States Circuit Court of Appeals, Eighth Circuit, December Term, A. D. 1918.

No. 5188.

SILVER KING COALITION MINES COMPANY, Appellant,

VS.

CONKLING MINING COMPANY, Appellee.

Appeal from the District Court of the United States for the District of Utah.

December Term, A. D. 1918.

No. 5190.

CONKLING MINING COMPANY, Appellant,

VS.

SILVER KING COALITION MINES COMPANY, Appellee.

Appeal from the District Court of the United States for the District of Utah.

Mr. T. Marioneaux and Mr. W. H. Dickson (Messrs. A. C. Ellis, Jr., and R. G. Lucas, were with them on the brief), for the Silver King Coalition Mines Company.

589 Mr. Edward B. Critchlow (Messrs. William W. Ray, William D. McHugh, William J. Barrette and William H. King were with him on the brief), for the Conkling Mining Company.

Before Sanborn and Stone, Circuit Judges, and Elliott, District Judge.

SANBORN, *Circuit Judge*, delivered the opinion of the court.

The decree assailed by these appeals is that the plaintiff below, the Conkling Company, a corporation, recover of the defendant below, the Silver King Coalition Mines Company, a corporation, \$542,222.58, on account of the latter's extraction and appropriation to its own use, of the plaintiff's share of the ore in the Conkling Lode Mining Claim, which the two corporations owned as tenants in common. Prior to the year 1907 Nicholas Treweek and J. Leonard Burch were the owners of an undivided $\frac{3}{4}$ th and the Kearne-Keith Company, a corporation, was the owner of the undivided $\frac{1}{4}$ th of this Lode Mining Claim. In that year Treweek and Burch conveyed their $\frac{3}{4}$ th and their causes of action against the

Kearns-Keith Company and the King Company, to the Conkling Company, and the King Company succeeded to the ownership of the Kearns-Keith Company's $\frac{1}{4}$ th and assumed its liabilities, so that the Conkling Company and the King Company stand in the same relation to each other as if each had owned the interest and had committed the acts of omission and commission of their predecessors or predecessor in interest. For the sake of brevity therefore, the acts of omission and commission of their respective predecessors will in this discussion be called their acts respectively.

The King Company first discovered ore in this claim in October or November, 1906. It had then long been in exclusive possession of that claim. It had run the Alliance Tunnel and numerous drifts and cross-cuts therefrom through its own land through the Conkling and other claims to enable it to reach and work ores wherever it might find them. As it was driving one of these cross-cuts through the ground of the Conkling Claim it discovered in that ground the ore in controversy. It did not notify its co-tenant of its discovery, but during the year 1907 it took out from Conkling ground and stored in drifts under ground many thousand tons of ore. In the latter part of 1907 the Conkling Company learned something of this operation and in December of that year and January, 1908, it demanded access to and an opportunity to examine the defendant's workings in Conkling ground, that

590 the ore taken therefrom should be kept separate from ores from other sources and that the King Company should account to it for $\frac{3}{4}$ ths of that ore. The King Company did not grant these requests. This suit was commenced on January 8, 1908, and after an application was made herein therefor, an order was made by the Court on June 30, 1908, with the consent of the King Company, that the Conkling Company should have access to the workings of the latter in Conkling ground and an opportunity to examine and survey them. The King Company, however, continued to extract the ore from this mine, a part of which proved to be within, and a part of which proved to be without the Conkling ground. From May, 1907, to August, 1910, and during the years 1913, 1914, 1915 and 1916 it did not keep the ore from Conkling ground separate from that outside that ground, but mingled the ores together. After April, 1909, the ore from the Conkling ground and from adjacent ground was hoisted by the King Company from the 500 foot level through the Silver Hill shaft, and the shift bosses kept a record of the number of cars of first class ore and of the number of cars of second class ore that were hoisted through that shaft. But no account of the amount of the ore taken from the Conkling ground, or of its value or of its proceeds, was kept by the King Company. The result was that when under the interlocutory decree it became necessary to determine the amount and value of this ore in 1917, the Conkling Company was dependent for its information on the testimony of officers and employees and the grant records of a corporation which had not informed it of the discovery of the ore, had not permitted it to examine its workings in Conkling ground until induced to do so by a suit and an application

for an order, had refused to keep an account of the volume of ore it took from Conkling ground, or of its value or proceeds, and had never rendered any account thereof until it presented one showing the amount due the Conkling Company to be \$78,638.61 in obedience to the interlocutory decree in the spring of 1917 preparatory to the final hearing. The claim of the Conkling Company was for about \$900,000. The decree of the court was for \$542,222.58, and the question raised by the assignments of error of the respective parties is the correctness of this amount which the King Company contends is too large and the Conkling Company insists is too small. The title and the respective rights of the parties to the Conkling Lode Mining Claim, especially to the 135 foot strip across its westerly end were adjudged by this court in 1916 in this suit, *Conkling Mining Company vs. Silver King Mining Company*, 230 Fed. 553, 140

C. C. A. 607, a motion for re-hearing was considered and denied, an application to the Supreme Court for a writ of certiorari failed, and this court is unwilling now if it might lawfully do so, to disturb that adjudication.

Turning then to the finding of the court below relative to the amount of the recovery, the indisputable fact is that many of the issues that conditioned the bases of the accounting were determinable only from conflicting testimony or from indirect evidence and the rational deductions therefrom, or from scant and unsatisfactory proof, so that after a study of the record the truth of the statement of the court below in opening its opinion on the accounting that "the record in this matter is voluminous but in many respects unsatisfactory, and the best that can be hoped for is an approximation of a true account between the parties," is conclusively demonstrated.

In this state of the case the rules and legal presumptions, by which this court should be guided in its consideration of the evidence and its review of the findings below, are of more than ordinary importance. Counsel have recognized this fact and their forcible and exhaustive arguments upon this subject have been thoughtfully considered with this result. As this court stated in *Silver King Coalition Mining Company of Nevada vs. Silver King Consolidated Mining Company of Utah*, 204 Fed. 166, 180, 122, C. C. A. 402, the King Company "was a trustee for the complainant of its share of the ore it took, and of the proceeds thereof. As such trustee it violated its duty to notify its cotenant of its entry and taking of the ore, its duty to keep the ore separate, its duty to keep an account of it and of its proceeds, and its duty promptly to account for and pay to its cotenant its just share of the proceeds of the ore." If the King Company had discharged these duties, the amount that should be recovered could have been readily ascertained and clearly proved. So uncertain did its failure so to do, render the amount it ought to pay in its own estimation, that it filed four accounts in this suit in which the amounts it stated its indebtedness to the Conkling Company varied from \$72,750.76 to \$262,161.22. In a suit of this nature the burden is upon the plaintiff to prove that the defendant took the plaintiff's ore or the proceeds of it and mingled it with the ore in which the plaintiff had no interest and

those facts were admitted or conclusively proved in this case. Then the burden of proof and the duty rested upon the defendant to prove the amount of the ore it took from Conkling ground and its proceeds or value, and to account and pay therefor, and if by reason of the failure of the defendant to keep the Conkling ore separate from other ore and to keep an account of the ore taken and its proceeds or value, the proof of the amount, the proceeds or value of any other facts requisite to make such proof, remained at the close of the hearing evenly balanced, uncertain or doubtful, the doubt should have been and should now be so resolved, in accordance with the basic principle of the accounting of a negligent or reckless trustee or agent, that the latter shall receive no profits from his wrongful treatment of the property of his cestui que trust, and the latter shall receive the just value of his property and its income. The King Company should not profit in this case by its own wrong and issues rendered uncertain or doubtful by reason of its failure to discharge its recited duties or by its confusion of the ores from Conkling ground with those from other sources, must be resolved against it. By that rule therefore and by the familiar rule that, where a court has considered conflicting evidence and made a finding or decree, the presumption is that it is correct and unless some obvious error of law has intervened, or some serious mistake of fact has been made, the finding or decree must be permitted to stand, *Coder vs. Arts*, 152 Fed. 943, 946; 82 C. C. A. 91, 94, 15 (C. R. A.) (N. S.) 372 this court must be guided in its review of the findings and decree below in this case.

As, when this case came to a hearing there was no account or record of the volume of ore taken from Conkling ground between May, 1907, and May, 1909, and as the only account or record of the ore taken therefrom after April, 1909, was the shift bosses' record of the amount of ore coming both from within and without Conkling ground that was hoisted from the 500 foot level through the Silver Hill shaft, and as that record failed to show what part of that ore came from within or from without the Conkling claim, the most available method of finding the volume of ore taken from that ground was to ascertain the extent of the cavity therein made by the King Company and then to estimate from such facts as could be proved from the recollection and testimony of witnesses and from surveys, the number of tons of first class or shipping ore and the number of tons of second class or milling ore the cavity originally contained, for every part of the cavity contained ore of each class, and there was a difference of several dollars per ton in the value of the two classes.

Mr. C. P. Brooks, a mining engineer, had been the engineer of the King Company during its workings, and had made surveys from time to time as the work in the Conkling progressed through the various stopes, drifts and cross-cuts therein, some of which were partly within and partly without the Conkling claim. The King Company to support the account it had rendered, called and examined Mr. Brooks at length. His testimony was that

the total cavity within Conkling ground was 302,173 cubic feet, and on that basis the accounting has been taken by counsel and the court. Mr. Brooks also testified to the number of cubic feet in the various cavities in the numerous stopes, drifts, levels, etc., which formed parts of the entire cavity. Having the cubic feet in the cavity or any part of it, it was necessary, in order to estimate the number of tons of each class of ore that had been taken therefrom, to ascertain or estimate what part of the material therein was ore, and what part, if any, was waste, how many cubic feet of the first class ore that had been in that cavity made a ton, and how many cubic feet of the second class ore from that cavity made a ton, and also the proportion of the first class ore to the second class ore therein. The evidence in answer to each of these questions was in hopeless conflict. Upon a consideration of all of it, the court reached the conclusion that it required six cubic feet of first class ore taken from the Conkling ground to make a ton, and 7.62 cubic feet of the second class ore to make a ton, and upon that basis the decree rests. The King Company earnestly contends that this finding was erroneous and that the decree should be reformed upon the basis of 7,275 cubic feet per ton of first class ore and 9,315 cubic feet per ton of second class ore. The evidence upon this issue is so voluminous that only a bare outline of its nature is permissible here. The King Company made its first and second accounts in this case on the basis of 9 cubic feet per ton of first class ore and 11 cubic feet per ton of second class ore. It made its third and fourth accounts on the basis of 7,275 cubic feet per ton of first class ore and its fifth account on the basis of 7,275 cubic feet per ton of first class ore and 9,315 cubic feet per ton of second class ore. Mr. Brooks was its chief witness. He testified that he took from the sides of the cavity after the ore in question was removed, five samples that he thought fairly represented the extracted ore, that he had them assayed by Mr. Hansen who had been the assayer of the Silver King Company since 1914, that he put his sample No. 1 which weighed 74½ pounds in a box, packed wheat around and over it, leveled the wheat with the top of the box, then took the sample out and measured the space between the top of the box and the wheat remaining to obtain the cubic contents of the sample, that he treated his samples two, three, four and five in the same way, that he weighed each of the samples, that all the samples except No. 5 proved when assayed, to be first class ore, although he picked one of the four for second class ore, that

594 he ascertained from the data he had thus obtained and the cubic feet in the various cavities, that sample No. 1 ran 7.07 cubic feet of first class ore per ton, sample No. 2, 8.37 cubic feet per ton, sample No. 3, 8.58 cubic feet per ton, sample No. 4, 9.72 cubic feet per ton, that the average number of cubic feet required to make a ton of first class ore according to these samples was 8.44 and that it required 11.17 cubic feet of second class ore like sample No. 5 to make a ton. Two scientific experts, took these samples and a sample called No. 6 taken from the cavity by one of the defendant's witnesses, or suitable specimens of them, pursuant to the agreement of the parties, ascertained and reported to the court the specific gravity

of each and the number of cubic feet of ore requisite to make a ton of each. They reported it required 6.5 cubic feet of first class ore to make a ton like sample No. 1, 7.7 cubic feet to make a ton like sample No. 2, 7.1 cubic feet to make a ton like sample No. 3, 7.8 cubic feet to make a ton like sample No. 4, and 5.2 cubic feet to make a ton of ore like sample No. 6, an average of 6.86 cubic feet of first class ore to a ton and that it would require 10.3 cubic feet of second class ore to make a ton like sample No. 5. After the King Company had introduced the testimony of Mr. Brooks and its other witnesses Harry D. Taylor was called as a witness by the Conkling Company. He testified that he was a mining engineer, a graduate of the Colorado State School of Mines in 1900, that he had so thoroughly examined the testimony and figures of Mr. Brooks, Mr. Humes and other evidence introduced by the King Company that he could arrive at the cubical contents of a ton of first class ore taken from the Conkling claim and at the cubical contents of a ton of second class ore taken therefrom, and that he had estimated to his entire satisfaction that the number of cubic feet of first class ore extracted by the King Company required to make a ton was six, and that the number of cubic feet of second class ore was 7.62, that he reached this conclusion by a process of elimination and calculation detailed in his testimony founded upon the testimony of Mr. Brooks, that the total number of cubic feet of material extracted from the 600 stopes in 1914, 1915 and 1916 was 183,523, and upon the number of tons extracted given in the cost analysis sheet, which was, generally speaking, treated by both parties upon the trial as correct. By this method he found that 1,777.10 tons of first class ore and 19,238.51 tons of second class ore were taken from the Alliance side of the 600 stopes in 1914, 1915 and 1916. He then subtracted from the 183,523 cubic feet 1/7th, the average of the figures of Mr. O'Neill, a witness for the King Company, for waste, leaving 157,305 595 cubic feet in the cavity of the 600 stopes that must have been occupied by ore and found that by allowing 6 cubic feet of first class ore to the ton and 7.62 cubic feet of second class ore to the ton, the 1,777.10 tons of first class ore and the 19,238.51 tons of second class ore would fill 157,295 of the 157,305 cubic ft. therein. Counsel for the King Company after describing Mr. Taylor's method write in their brief. "There is nothing faulty about Mr. Taylor's mathematics here, but the 600 stopes must be taken to mean all the stopes on the Alliance side below the 500 foot level" and they insist that his conclusions are not only inaccurate but without probative force because neither he nor Mr. Brooks included in the 183,523 cubic feet of cavity the space in 700 drift stope, 3,402 cubic feet, in the 704 foot drift through ore, 3,430 cubic feet, in the 700 level drift through ore, 9,030 cubic feet, or in 707 raise stope 1,090 feet. In support of this contention counsel present a persuasive array of evidence and argument. It is, however, difficult to believe that Mr. Brooks was either ignorant of the facts or in error in his testimony on this subject. He was the engineer of the King Company, familiar with its doing and with the mining property, more familiar than any other witness in the case. He testified in much detail regarding

the 600 stopes, that is to say, the stopes below the 500 foot level from which ore came out of the Conkling through the place where the tonnage was recorded in 1914, 1915 and 1916, that the total cavity therein contained 183,523 cubic feet and that there were no other stopes the material of which came out through the 600 level during those years. This testimony of Mr. Taylor and Mr. Brooks formed a substantial basis if true, as counsel concede, for clear proof of the number of cubic feet of ore of each class in the Conkling claim required to make a ton. There was no suggestion by that company in the examination of Brooks or Taylor that the testimony as to the number of tons or as to the number of cubic feet in the 600 stope was either false or inaccurate. Taylor took the number given by Brooks, made his proof on that basis, and now the King Company insists it is no proof because its witness was mistaken and the testimony he gave was erroneous. The evidence shows that some of the stopes below the 500 level were called by different names at different times, but that the term 600 stopes was often but not always used to denote all the stopes on the Alliance side below the 500 level, that the King Company and Mr. Brooks probably knew more of the facts in this case than Mr. Taylor and the Conkling Company, and that the latter had reason to rely upon his evidence. Each party has been able to present evidence that its opponent's basis when applied
596 under assumptions it makes to a specific stope it selects, demonstrates its erroneous character. There is much evidence on the subject under consideration that has not been recited. The evidence for 9,315 cubic feet per ton of second class ore is not convincing. Perhaps its best support is the single sample of second class ore taken from the exhausted cavity by Brooks, which according to his testimony required 11.17 cubic feet per ton and according to the two selected experts 10.3 cubic feet per ton. Brooks himself testified that the taking of this single sample of second class ore and inferring from it that all the second class ore in the mine required the same number of cubic feet as this sample to make a ton was not the proper way of arriving at the desired result, and that he had intended to get and thought he had taken more samples of the second class ore but when they were assayed all he had taken, except this one, proved to be first class. This mistake in his selection rather indicates that consciously or unconsciously he underestimated the grade and value of the Conkling ore. So improbable *was* his deductions from his sample and from his experiments on this subject that the second class ore ran 11.17 cubic feet per ton, that the court and both parties to the suit refused before the final argument below to follow it.

His conclusion from the samples of first class ore that 8.44 cubic feet of the first class ore were required to make a ton was also discarded by all parties. The King Company now claims only 7.275 cubic feet. The average derived from the number of cubic feet found by the two experts from the five samples submitted to them was 6.86 feet and the court below found 6. There was a large amount of evidence as to the class and character of this ore from witnesses who had seen it or seen the samples of it remaining in the cavity. Some

of this testimony persuasively indicates that there was much ore in the cavity of a high grade that was not adequately represented by the samples, and after much deliberation our conclusion is that the record is insufficient to warrant a decision that the court below made any mistake in its finding that the number of cubic feet required to make a ton of first class ore taken from the Conkling claim was six, and that the number of cubic feet required to make a ton of the second class ore taken from the Conkling claim was 7.62.

The court below found that there was no waste in the material extracted in 1907 and 1908, and that the waste in the material taken out in 1909, 1910, 1913, 1914, 1915 and 1916, wherever the matter of waste was important, was 1/7th. The King Company insists

that the court should have found that 1/7th of the material
597 taken in 1908 was waste, but the facts that there is no claim

that there was any waste in the material extracted in 1907, that the material extracted in 1907 and 1908 was adjoining and similar, that the King company made no claim of waste in 1908 in its first two accounts, and a consideration of all the other evidence on this subject failed to convince that there was any error in the finding of the court in this regard.

The court concluded that $\frac{1}{2}$ of the ore extracted in 1907 was first class, and that the other half was second class, and that in the ore extracted in 1908 the proportion of first class to second class was one to two. Counsel for the King Company argue that the evidence proves that not more than 40% of the ore extracted in 1907 and not more than $\frac{1}{8}$ th of that taken in 1908 was first class ore. A review of the testimony on this subject has satisfied that there is more probability that the court found the proportion of first class ore for these two years too small than there is that it found it too large. The evidence, however, does not make clear or convincing proof that any other proportion than that found by the court would be likely to be nearer the actual fact than its finding and that finding is accordingly left undisturbed.

After May 1, 1909, the number of cars of first class and of second class ore was recorded in the shift bosses' records and the court below adopted the proportion of first class to second class deduced from that record and applied it, not only to the ore taken after May 1, 1909, but also to the ore extracted during the first four months of that year. The evidence discloses no method more likely to produce a correct result. Many less important objections to the findings of the court as to the volume of the ore and many alleged discrepancies between the evidence and the findings have been argued and considered. It was impossible in the nature of the case to prove or to find the true value of this ore, the true amount of each class, or the exact proportion of the classes. The duty nevertheless was imposed upon the court below to make findings upon these subjects as near to the facts as it could. This court upon a review of all the evidence upon these subjects despairs of making findings or reaching a conclusion thereon more nearly correct than those of the court below, and they must therefore stand.

In determining the value of the ore taken by the King Company,

the court divided the time of the taking into yearly periods, and, with one or two exceptions, found the value per ton of the ore extracted from the Conkling ground to be the same as the
598 average yearly price per ton received by the King Company from the mixed ore of its class sold by the King Company during that year. Prior to April, 1907, the Kearns-Keith Company extracted and stored in drifts and levels 659.15 tons of crude or shipping ore and 252.06 tons of concentrates. This ore was shipped, assayed and sold by the King Company after April, 1907, and its metallic contents were proved. The King Company insists that the metallic contents of all the ore taken from the Conkling mine should have been found to be the same as those of the K-K shipments and that on that basis its value should have been estimated. This contention presents the question—did the value per ton of the K-K shipments mined in 1906 probably more nearly represent the value per ton of the shipments mined from Conkling ground in the years 1907, 1908, 1909, 1910, 1913, 1914, 1915 and 1916, respectively, than the average value per ton of the mixed ore taken from the Conkling and adjoining ground in the same mine during those years respectively? A thoughtful review of all the evidence upon this subject has led the court to believe that this question must be answered in the negative.

The Conkling Company is discontented with the value of the ore found by the court and insists that it is too low and that its finding should have been based, not upon the yearly average price per ton obtained for the mixed ore, but upon the highest price per ton received by the King Company during each yearly period from any of the ore taken from the mine during such period pursuant to the rule that where one knowingly mixes the goods of another with his own or fails in his duty to keep them separate so that the value of the former cannot be ascertained, he should suffer all the possible loss and inconvenience from his breach of duty. The existence and beneficence of this rule is conceded but like other equitable principles and rules it must be so applied to the particular facts of each case, if possible, as to work out substantial justice to each of the parties to the litigation. If all the ore in controversy had been taken from that part of Conkling ground easterly of the 135 foot strip without the knowledge of the Conkling Company and without opportunity for it to examine the ore and measure the work or the cavity during the process of the extraction, it might have been just and necessary to charge the King Company the highest price it received from any of the mixed ore in each year. But the great bulk of the ore came from the 135 foot strip. The King Company claimed the exclusive ownership of that strip and its officers testified
599 that they believed that the claim was well founded. In view of the facts that the District Court sustained that claim, that the nature of the controversy was such that the King Company and its officers cannot be held to have been without probable cause to believe that its claim might be sound until it was otherwise adjudged by this court, and that from July, 1908, under the order of the court below the Conkling Company had the privilege

and opportunity of examining the ore as it was removed, and of surveying the cavities from which it was taken, this court is of the opinion that the use of the average yearly prices of the mixed ore sold as the basis of the estimated value of that taken from the Conkling claim, is more likely to produce a just and equitable finding of its value than the use of the highest price of any of the mixed ore sold during each year. It is, therefore, unwilling to change the basis of the estimate of the value of the ore which the court below adopted.

Counsel for the Conkling Company also complain that the prices received by the King Company for the mixed ore it sold after January, 1909, were at least \$3.00 per ton less than it could and should have obtained, and that on that account this court should increase the value found below of the Conkling ore taken during that time at least \$3.00 per ton. The King Company proved without objection that it sold the mixed ore it mined after January 1, 1909, under the Heinze contract, which was made May 21, 1907, and ran for ten years after January 21, 1909. It introduced in evidence without objection that contract, and two preceding contracts dated respectively September 1, 1903, and June 14, 1907, under which the King Company and its predecessors in interest had sold and delivered their ore to the American Smelting & Refining Company. Over the objection of the King Company the Conkling Company introduced in evidence two contracts of the American Smelting & Refining Company; one with Little Bell Consolidated Mining Company dated May 2, 1906, exhibit No. 110, and one with the King Company dated May 25, 1911, exhibit No. 111, and a contract between Wilbert Mining Company and Knight & Warnock, dated February 17, 1915, exhibit No. 115, but neither of these three exhibits is found in the record in hand. The King Company also introduced in evidence the testimony of Mr. Howard to the effect that he had compared the Wilbert contract with the Heinze contract, and that although there was some difference in the penalties imposed by the two contracts, the Wilbert contract yielded \$4.00 or \$4.50 per ton more to the vendor of the ore than did the Heinze contract on the sale of lots of ore described in exhibits No. 113 and 114, but these exhibits are not in the record. The Wilbert contract
600 was dated February 17, 1915. The Heinze contract was dated in 1907, more than seven years earlier. It covered a period of ten years. There is no evidence before this court to show that the market value of the ore was the same or approximately the same in 1915 that it was in 1907. There is no evidence to show the time the Wilbert contract was to run. The record, however, contains two time contracts, under which the King Company or its predecessor sold its ore prior to the term of the Heinze contract, and the latter does not appear to be less favorable to the vendor than were the two contracts that preceded it. Counsel for the Conkling Company argue that the King Company made the Heinze contract to sell its ore for less than its value from the fact that it contains an agreement for the sale to Heinze of a large amount of the stock of the King Company.

But there is no evidence that he was buying the stock at a price greater than its value in order to get the ore at a price less than its value, and the legal presumption is that he agreed to pay a fair price for both. There is, therefore, no evidence here that the prices obtained under the Heinze contract were less than they should have been, except the testimony of Mr. Howard that Wilbert's contract of 1915 was more favorable to the vendor than the Heinze contract of 1907. This is insufficient to warrant an appellate court in changing the finding of the court below in view of the facts that the Heinze contract of 1907 was more favorable to the vendor than its prior contracts, that more than seven years intervened between the Heinze contract and the contract of Wilbert, that the court below had before it for examination and comparison the Little Bell contract, the King contract of May 25, 1911, and the Wilbert contract, neither of which is presented to this court, and that the court below upon a view of all this evidence concluded that the price fixed by the Heinze contract represented the fair value of the ore.

In the accounting, the court below allowed to the King Company, as a part of its expense of extracting, preparing and marketing the ore, \$22,283.14, which it found to be one-half of the King Company's predecessor's expense, and of the interest thereon to May 1, 1907, in cleaning and extending the Alliance Tunnel and the cross-cuts and drifts therefrom in Conkling ground. The King Company complains that the court did not allow it the whole of that expense and interest thereon, and that it did not also allow it \$10,853.12 more on account of the expense and interest thereon of driving certain cross-cuts and drifts from the tunnel on account of
601 which no allowance was made. On the other hand the Conkling Company contends that nothing should have been allowed on account of any of these expenses.

The general rule is that a co-tenant in the exclusive possession of mining property who extracts and sells the ore may charge against its proceeds the reasonable and necessary expenses of its extraction and marketing. The ore was all extracted and marketed between September, 1906, and the year 1917. The expenses of cleaning and extending the Alliance Tunnel were incurred between 1901 and 1903. The Arthur lode mining claim lies easterly of the Conkling claim and the parties hereto and their predecessors in interest have owned the former in the same proportions as they have owned the latter from a time anterior to 1902. The portal of the Alliance Tunnel is more [that] a mile and a half easterly of the east line of the Arthur claim and more than 10,000 feet [distance] from the stopes in the westerly end of the Conkling mine from which the ore in dispute was taken, and none of it was ever taken out through that portal. The King Company, (in fact its predecessors in interest) was and it now is the exclusive owner of the land east of the Arthur claim and prior to the year 1892 it or its predecessor ran this tunnel until it reached a point about ninety feet east of the easterly line of the Conkling claim near its northeast corner. By the year 1902 this tunnel had become caved in places and badly out of repair. Thereupon the King Company cleaned it out and drove it westerly along

near the northerly line of the Conkling claim, part of the way without, but most of the way within that claim, until it passed out of the westerly end thereof whence it was connected by a drift from the tunnel to the Silver Hill shaft and station which are located a short distance northwest of the southwest corner of the Conkling claim. On January, 1905, this tunnel had reached a point about 135 feet east of the west line of the Conkling ground. The King Company during the year 1906 drove the McKay cross-cut from that point which was a few feet south of the north line of the Conkling, southerly, nearly at right angles to the course of the tunnel, and while so doing, it discovered the ore in controversy, in November or December, 1906, near the south line of the Conkling ground. Inspired by this discovery it concealed the ore and the fact, and bought for \$125,000 in April or May, 1907, the Belmont Mining Claims, some of which adjoin the Conkling on the West and contained a part of the body of the ore the King Company had discovered, and on one of which the Silver Hill shaft and station is located. It has used the tunnel to approach and to aid it in working the Belmont group of mines, and has used some parts of it to take out some of the Conkling ore. There is some ore remaining in the Conkling, but as part of the tunnel is in ground owned by the King Company exclusively, the Conkling Company has no right to use the tunnel to take that ore out. A large quantity of water gathers in and flows in a ditch repaired and extended during the cleaning and extension of the tunnel and the King Company has had and still has the use of this water for its boilers and for household and culinary purposes, and has received for the surplus above its needs between 1900 and 1907 \$18,391.55 and between June 1, 1907, and December 31, 1916, \$23,000.00, in all \$41,391.55, but no credit for any of this income has been taken into consideration or allowed to the Conkling as an offset against the expense of cleaning and extending the tunnel charged against it. The Court below allowed to the King Company the entire amount of the expense of driving the McKay cross-cut and the interest thereon. Should it also have allowed to it the expense of cleaning and driving the tunnel and the opening of the many drifts and cross-cuts along its course in Conkling ground from which some, how much we know not, ore was extracted, and which expense the King Company claims amounted with [interests] to \$62,842.43?

It argues that this allowance should be made because this expenditure resulted in the discovery and the extraction of the Conkling ore. By the same mark it caused the discovery, the purchase and the extraction by the King Company of the ore from the Belmont group and if the Conkling Company is to pay for the tunnel on the ground here urged why should not the King Company account to it for the Belmont ores? It is the reasonable proximate causative, not the remote and inconsequential expense of discovering, extracting and marketing ore that is allowable to the tenant who secretly takes the common property and appropriates to himself his co-tenant's share of its proceeds. There is testimony in the record that if the Conk-

ling Company had known where the ore was it would have cost it \$82,000.00 to have sunk the requisite shaft to reach it, but this is no reason why the Conkling Company should pay to its co-tenant who discovered and appropriated its share of the ore, any more than the reasonable approximate expenses of the discovery, extraction and marketing thereof.

The tunnel before it was cleaned and extended did not produce and conduct the volume of water and produce the revenue from that source which it has since brought, nor was it useful to the King Company as an adit to the ores in the Belmont group or in the removal thereof. If the Conkling Company were to pay for this cleaning and driving then it should have credit for at least some of the proceeds and benefit derived from it by the King Company. The revenue the latter has derived from the sale of the surplus water alone with interest thereon to May 1, 1907, exceeds all the expenses of cleaning and extending the tunnel and the interest thereon, to say nothing of the value of the use of all the water the King Company needed and the benefit of its use of the tunnel for transportation purposes. In the opinion of this court none of the expense of cleaning and extending the Alliance Tunnel and the drifts, chutes and cross-cuts therefrom should have been allowed to the King Company in this accounting.

The King Company urges that it should be allowed what it would have cost the Conkling Company to have sunk a winze from the 500 to the 700 level, \$50.00 per foot or \$10,750.00 because the King Company took its ore up from the 600 and 700 levels through its Silver King shaft which it had sunk to the 900 level at the expense of \$125.00 per foot, but the King Company sunk that shaft on its own ground for its own purpose, and in the accounting it was allowed the agreed cost of mining and tramming the Conkling ores which the King Company took out through that shaft. The Conkling Company has no right to the use of that shaft, it owns no interest in it, and there was no error in the refusal of the court below to make an additional charge against it for the expense of sinking a winze that never was sunk.

The King Company also insists that in addition to the stipulated cost of mining, milling, etc., the Conkling ore which was allowed to it in the accounting it should be allowed \$18,304.69, which it claims is the proportion of the interest from May 1, 1907, to April 1, 1916, on the amount it invested in mine buildings, and machinery, that the Conkling ore bore to all the first class ore the King Company took from that mine during that period, and \$14,463.24, which it claims is the proportion of the interest from May 1, 1907, to April 1, 1916, on the amount it had invested in mill buildings, etc., that the number of tons of Conkling concentrates bore to the number of tons of concentrates derived from the entire mine. But there is no proof that these investments in mine buildings, mill buildings and machinery were made for the purpose of handling the ore from the Conkling claim, nor that they would not have been made if there had been no discovery of ore in the Conkling claim. The Conkling

604 Company has never had, and has not now any title or right of use of these buildings or machinery or of any of them. The King Company took the Conkling ore without the request or consent of the Conkling Company, it failed to keep it separate or to account for it, it has been allowed in the accounting the stipulated cost of mining, tramming and milling, and its claim to be allowed a part of the interest upon its investments in addition does not appeal to the conscience of a chancellor.

The conclusion of the whole matter is that the \$542,222.58 named in the decree should be increased to \$570,076.50 by the addition to the former amount of the sum of \$27,853.92, which is $\frac{3}{4}$ ths of \$22,283.14 the expense of cleaning and extending the Alliance Tunnel plus the interest on that $\frac{3}{4}$ ths from May 1, 1907, to March 1, 1918. Let the decree be so modified and thus modified, let it be affirmed.

Filed December 19, 1918.

(Decree.)

United States Circuit Court of Appeals, Eighth Circuit, December Term, 1918.

Thursday, December 19, 1918.

No. 5188.

SILVER KING COALITION MINES COMPANY, Appellant,
vs.

CONKLING MINING COMPANY,

and

No. 5190.

CONKLING MINING COMPANY, Appellant,

vs.

SILVER KING COALITION MINES COMPANY.

Appeals from the District Court of the United States for the District of Utah.

These causes came on to be heard on the transcripts of the records from the District Court of the United States for the District of Utah, and were argued by counsel.

On consideration whereof, it is now here ordered, adjudged and decreed by this Court, that the decree of the said District Court, in these causes, be, and the same is hereby, modified by increasing the \$542,222.58 named in the decree to be recovered from the defendant, Silver King Coalition Mines Company, by the plaintiff, Conkling

Mining Company, to \$570,076.50, by the addition to the former amount of the sum of \$27,853.92 which is three-fourths of \$22,283.14, the expense of cleaning and extending the Alliance Tunnel plus the interest on that three-fourths from May 1, 1907 to March 1, 1918, [as] as thus modified the decree of said District Court is hereby affirmed without costs to either party in this Court.
December 19, 1918.

607 In the United States Circuit Court of Appeals, Eighth Circuit.
No. 5188.

SILVER KING COALITION MINES COMPANY, Appellant,

VS.

CONKLING MINING COMPANY, Appellee.

Petition for Re-hearing.

Comes now the appellant, and respectfully petitions this Honorable Court for a rehearing of said cause, for the following reasons, namely:

Value of Ore.

1. It seems to appellant that the rule announced by the Supreme Court of the United States in *Westinghouse v. Wagner*, 225 U. S. 604, is to the effect that where the defendant has mixed with his own the property of the plaintiff, and sold the whole, and the plaintiff sues for his share of the profits, the law does not cast upon the defendant the burden of proving the value of the plaintiff's share until the plaintiff has by evidence affirmatively proved that because of the mixture and confusion of goods with those of the defendant he is unable to prove the value of his share; whereas it appears that in the opinion of this Honorable Court the burden was on the defendant to prove the value of the Conkling ores, notwithstanding that the Court itself points out in its opinion "that from July, 1908, under the order of the court below, the Conkling Company had the privilege and opportunity of examining the ore as it was removed, and of surveying the cavities from which it was taken." (See Opinion, page 12.)

608 Upon this question of the ability of the Conkling Company to prove the value of the Conkling ore we beg to call attention again to the following evidence:

On July 5, 1909, the Conkling Mining Company filed an amended bill in this suit in which it is averred in effect that the value of the ore bodies in the Elephant stope had been ascertained by Treweek and Burch, the original complainants. We quote from this amended bill:

"XV. Your orator further alleges that under and pursuant to an order of this Honorable Court, made herein on the thirtieth day of June, 1908, permitting the then complainants herein, Nicholas Treweek and J. Leonard Burch, with their experts, agents and surveyors, the free and unmolested right to enter upon the aforesaid underground workings for the purpose, among other things, of measuring and determining the amount and value of the ore that had been mined by the said defendant company underneath the surface of said Conkling and Arthur lode mining claims, the said Treweek and Burch were able for the first time to, and did, ascertain the actual facts in respect to said secret underground workings as aforesaid, underneath the surface boundaries of said Conkling lode mining claim as described in said patent and herein, within planes extended downward vertically, and of the location of the ore body within said Conkling lode mining claim, and the character and extent of the ore body developed therein, and of the importance and great value of said Conkling lode mining claim, which is only valuable for the ores therein contained."

Mr. Samuel Percival Parker, a nephew of Col. Treweek, president of appellee company, was called and examined by appellee. He testified that he visited the ground in controversy the latter part of July or first of August, 1908, with Will Treweek, a son of Col. Treweek. (Tr., p. 378.) Mr. Parker also testified: "After this visit in July or August, 1908, I made periodical visits to that part of the mine for practically four years, up until July, 1912. Sometimes I might go twice a week; sometimes I would not go for three weeks, and so on. I saw the work that was being carried on in the Incline stope. I was down that stope. I was in this Incline stope about the end of 1909, or the beginning of 1910. * * * I believe I have some data on this from which I could refresh my recollection, but I haven't it with me! On these various trips I made into the Elephant stope during those four years I should say Col. Treweek was with me at least a third of the trips. Whenever he was there he made notes of everything, and packed a transit and a compass and a tape, and I reported to Col. Treweek the results of all my trips. I have seen these notes that Col. Treweek made. Col. Treweek packed a transit in there, and made surveys before Mr. Anderson made any surveys, and after that time, too, I think. * * *

"Q. Was there ever any time when you were forbidden access or stopped from going anywhere in the stope?

"A. No, sir; never." (Tr., p. 379.)

Samuel Treweek, a son of Col. Treweek, testified:

"Q. After 1908, in July, when were you next there? (Referring to the stopes in question.)

"A. Off and on, Mr. Critchlow. I would go in the mine whenever father wanted me to go; sometimes he couldn't get Mr. Gillette, and I would go over with him. He never cared to go into the mine

alone. He always went with someone. It was a very short distance from where I was working. I can not tell you how many trips made to the mine in 1908. I visited the ground also in 1909, and 1910, but not a great many times in 1910. * * * (Tr., p. 377)

"In July, 1908, as I have said, there was but little if any caving in the ground, and after that visit we were always at liberty to go in the ground in controversy whenever we desired to do so, or to send our engineers or anybody else. * * * At the time my father and I went in there in July, 1908, father kept notes of what he observed there, and everything that he did. Those notes are still in existence."

Will Treweek and Mr. Gillette were not called as witnesses, and no excuse was given for the failure to call them.

The record shows conclusively that the Conkling Company failed at the trial to produce any of the testimony which it had gathered during the four years referred to, for the purpose of proving the value of the Conkling ores.

It is not to be doubted that after the Conkling Mining Company procured the order of June 30, 1908, which expressly granted it the right "to measure and determine the amount and value of the ore that that may have been mined by the defendant company from and underneath the surface of said Conkling and Arthur lode mining claims, and for that purpose to enter with their experts, agents and surveyors the Alliance tunnels, and all drifts, winzes, upraises or stopes from all parts thereof after it passes into said claims, and into the ground adjoining and belonging to the defendant company, and to the face thereof," it did not procure its agents and servants to visit the stopes merely to look at the work. It had brought a suit for an accounting for the ore that had been extracted, and it was demanding an accounting for the ore that was being extracted, and knew that no account was being kept. Under such circumstances, unless the record affirmatively proves the contrary, we must suppose that, acting according to the ordinary dictates of human nature, the
610 Conkling Company procured abundant samples of the first and second class ore, and had such samples properly assayed and preserved such assays. Mines are actually purchased after careful sampling of the ore in sight. Such sampling, of course, does not consist of the taking of a specimen, but consists of scores and hundreds and sometimes thousands of samples across and up and down the face of the exposed ore measures. The evidence afforded by such samples is very satisfactory proof of the value of the ore in sight. The manner of sampling is common knowledge in the mining states. The Conkling Company knew how to have the ore sampled in order to prove its value. How diligent it was in regard to visiting the stopes, the testimony discloses.

Having ascertained and being still presumably in possession of the actual facts in respect to the character and extent of the ore body and the value of the Conkling ores, which information, of course, must have been based upon assays made of numerous average samples taken from the ore body after the order of June 30, 1908, during con-

tinual visits to the stope for a period of four years, the Conkling Company nevertheless proceeded to the hearing of this accounting and failed to produce or to give any explanation of its failure to produce any of the evidence admittedly in its possession with respect to the value of the Conkling ores.

It must be remembered that we are dealing with a single ore body. The samples taken by the Conkling Mining Company were taken for the purpose of proving the value of the Conkling ore. They were taken, too, by one having an interest to make out the value of the ore to be as high as possible.

We submit that under such circumstances where the defendant has taken the ore in good faith (and this Court finds that the King Company did take the ore in good faith and had justifiable grounds for its opinion that the Conkling ores were its exclusive property), there is no reason why the evidence of the defendant in respect to the value of the Conkling ores should be dealt with as coming from a suspicious source, or why it should be discarded with the thought that if accepted the plaintiff might not receive its full share of the profits. We concede that if the ore had been taken in bad faith and the plaintiff had no means of proving the value of its share of the Conkling ores, the burden would properly be cast upon the defendant to prove by very satisfactory and convincing evidence the mineral contents of ores taken from the Conkling ground, and the proceeds of the sale thereof, with a view to making it certain that the defendant should not profit by its own wrong; but neither of these two conditions exist in this case, or is found to exist by the opinion of this Honorable Court. As we understand it, the good faith of the defendant is taken as established, and the evidence of the 611 ability of the Conkling Company to make proof of the value of the Conkling ores is absolutely beyond dispute. In these circumstances the evidence of value of the Conkling ores submitted by the defendant ought not to be rejected. It is proved by the defendant that there were actually shipped from the Conkling ground, in the K-K shipments made in 1907, 659 tons of crude or shipping ore, and 725 tons of second-class ore. The actual metallic contents of these shipments are proved by the smelter returns.

Mr. Hurley, a disinterested witness, testified that these shipments came from the very core and heart of the ore body, and contained as good ore as was at any time extracted from the stopes from the time the ore was struck and until he left the employ of the company in July, 1910.

The testimony of Mr. James Humes and Mr. Con O'Neil shows that the ore below the 500 level was of approximately the same quality and the ore from the Elephant stope—as the ore contained in the K-K shipments.

The value of the Conkling ore is shown not only by the K-K shipments, coupled with the undisputed testimony of Mr. Hurley that the ore in these shipments was as good as any ore extracted from the stopes between May, 1907, and July, 1910, and the testimony of Mr. Dailey and Mr. O'Neil and Mr. Humes that all the ore on and below the 500 level was of substantially the same quality; but

there is the added testimony of Exhibit 96, contained on page 539 of the record, under the words, "Alliance first class, June 1st to December 31, 1916." Here it is shown that there were shipped from this same vein the identical ore body in controversy, 298 tons of ore, the mineral contents of which, per ton, were:

Gold, oz. per ton, .025;
Silver, oz. per ton, 17.81;
Lead, per cent, 28.6.

On this exhibit is also shown "Value per ton of ore shipped from the different sections of the mine."

	Silver King side.	Alliance side.
Skidoo	\$89.04	\$38.80
500, 700 and 900 levels.....	50.09	
1300 section.....	49.49	
O'Brien stopes.....	43.86	

The same exhibit also shows as follows:

Silver King side:

Average crude.....	\$52.17
Average concentrates.....	36.84

Alliance side:

Average crude from Alliance side.....	\$38.80
Average concentrates, Alliance.....	32.25

612 It is true that where a court has decided a fact upon conflicting evidence, its findings will not ordinarily be disturbed, but this rule we conceive has no application where the finding is the result of an obvious failure to properly weigh the evidence and give effect to those just inferences which arise from undisputed facts. In the case at bar, speaking with reference to the value of the Conkling ores, the Conkling Company, instead of candidly laying before the tribunal the evidence which it had gathered by its agents after the making of the order of June 30, 1908, contented itself with selecting a piece of high-grade ore from the mine during the trial, and calling a couple of witnesses to testify that the ore that they mined ten years before was similar to the sample shown them. (Exhibit 109.) No effort whatever was made by the Conkling Company to show the value of the second class ore extracted. With the greatest deference to this Honorable Court, we believe that the appellant here has not been allowed the full advantage of the inferences and conclusions which ought to be deduced from this withholding of the evidence of the values of the ores, by our opponent.

Nelson, J., in *Clifton v. U. S.*, 4 How. 247:

"One of the general rules of evidence, of universal application, that the best evidence of disputed facts must be produced of which the nature of the case will admit. This rule, speaking technically, applies only to the distinction between primary and secondary evidence; but the reason assigned for the application of the rule in a technical sense is equally applicable, and is frequently applied, to the distinction between the higher and inferior degrees of proof, speaking in a more general and enlarged sense of the terms. * * * Even in cases where the higher and inferior testimony cannot be solved into primary and secondary evidence, technically, so as to compel the production of the higher, * * * the same presumption exists in full force and effect against the party withholding the better evidence, especially when it appears, or has been shown, to be in his possession or power, and must and should in all cases exercise an inconsiderable influence in assigning to the inferior proof the degree of credit to which it is rightfully entitled."

See also *Graves v. United States*, 150 U. S. 118;

1 *Wigmore on Evidence*, Section 285, et seq.

3

Volume of Ore.

4. It is demonstrable from the printed record that in the years 1914 and 1915, there were not extracted from the 600 stopes more than 1753.67 tons of first class ore, and in the years 1914, 1915 and 1916, not to exceed 17,992.03 tons of second class ore; and that Mr. Taylor's figures, 1,777.10 tons of first class and 19,238.51 tons of second class, from 600 stopes in these years, are erroneous.

The record affirmatively shows by evidence which is wholly uncontradicted, that the determinations 6 cubic feet per ton for first class ore in place in the mine, and 7.62 cubic feet per ton for second class, are erroneous.

(a) On page 412 of the printed record, under the title "The Summary," Mr. Taylor sets down for 1914:

240.34 tons of first class.

2003.44 tons of second class.

Both these figures result from errors in addition and subtraction made by Mr. Taylor in the calculations preceding the Summary.

(b) Mr. Taylor's summary also contains the following statement:

1915: * * * 15,579.57 tons of second class.

The last tonnage above stated is assumed by Mr. Taylor to have come exclusively from the 600 stopes considered by him. The evidence proves affirmatively that 1224.36 tons of it were taken from the 700 level stopes.

According to Mr. Taylor's own figures the entire tonnage of second class ore extracted from the Alliance side in 1915 was 15,840

tons. Mr. Taylor deducts 260.43 tons, and assumes that the balance came from the three 600 stopes alone.

The record shows without dispute that 1224.36 tons of the total of 45,734 tons of second class ore produced by the entire mine in 1915, as found by Mr. Taylor, came from the 700 level on the Alliance side, and there must, therefore, be deducted from the 15,579.57 tons of second class under the year 1915, in Mr. Taylor's summary, this ore from the 700 level, leaving for 1915, from the 600 stopes, 14,355.21 tons of second class ore.

In our reply brief we called attention to Mr. Taylor's errors in addition and subtraction, in attempting to show that his conclusions were erroneous; but we did not point out specifically enough, perhaps, just what ratios Mr. Taylor himself would have been compelled to arrive at for first and second class ore if he had made the necessary corrections in his calculations.

We will first proceed to point out Mr. Taylor's errors, of which there can be no dispute, and will then ascertain the ratios which result according to Mr. Taylor's method of determination.

We will next show our justification for saying that the evidence demands the subtraction of 1224.36 tons of second class ore from Mr. Taylor's 15,579.57 tons of second class given in his Summary under 1915, on page 412 of the printed record. Upon this point we will discuss only the undisputed testimony.

Mr. Humes (page 411 of the record), gave the number of cars of first class extracted from the King side in 1914, and they total 17,046 cars. The total of the number of cars of second class extracted from the King side in that year given by Mr. Humes is 89,249 cars.

Mr. Taylor, making two mistakes in addition, found that Mr. Humes' first class cars aggregate 17,048, and the second class 88,249.

We have tabulated Mr. Humes' testimony as to the number of first and second class cars of ore extracted from the King side in 1914, on page 21 of our opening brief, taken from page 300 of the printed record, and that Mr. Taylor was in error cannot be gainsaid.

In paragraph 6 on page 411 of the printed record (Taylor's testimony), we must change 17,958 to 17,956 cars of first class, and 94,524 to 95,528 cars of second class. It follows that the figures in the first paragraph on page 412, must also be changed. 94,524 becomes 95,528, and 1268 pounds to the car becomes 1254 pounds to the car of second class.

The next error in Mr. Taylor's figures is shown in this same paragraph. He gives the total ore extraction from the the entire mine in 1914, according to the cost analysis sheet, and gives it correctly, as 77,439 tons, including both first and second class.

He deducts 59,907 tons of second class and gets a remainder of 18,532 tons for the first class shipped in the year 1914. This remainder ought to be 17,532. Mr. Taylor made a mistake in subtraction.

Mr. Taylor multiplies 18,532 by 2,000 and divides it by the cartage of first class, namely, 17,958 (which we have seen should be 17,956), and gets 2,063 pounds to the car of first class. Making the necessary correction we multiply 17,532 by 2,000, and divide it by the correct

cartage of first class, 17,956, which gives us instead of 2063 pounds to the car of first class, 1952 pounds.

615 Mr. Taylor's figures in the second paragraph on page 412, now indisputably must be altered. For the moment we question nothing but his figures. He multiplies 233 cars by 2063 pounds, divides by 2,000, and arrives at 240.34 tons of first class in 1914.

Making the necessary corrections, we must multiply 233 by 1952 and divide by 2,000, which gives us 227.40 tons for the summary under 1914.

Again in the second paragraph on page 412, Mr. Taylor multiplies 3160 cars by 1268 pounds, and dividing by 2,000 gets 2003.44 tons of second class.

Making the correction, which we have seen above is necessary, we multiply 3160 by 1254 pounds, and dividing by 2,000, we get 1981.32 tons of second class, which must take the place of 2003.44 tons in Mr. Taylor's summary under 1914. (Page 412, printed record.)

To arrive at the tonnage which Mr. Taylor gives in his summary under the year 1915, (printed record, page 412), he takes the cost analysis sheet for this year, and finds that there were extracted from the entire mine, the King side plus the Alliance side—

First class, 31,690 tons.
Second class, 45,734 tons.

Referring to Mr. Humes' testimony, Mr. Taylor says, and says correctly, that Mr. Humes gives the ore extraction in 1915, from the King side, as follows:

First class, 30,148 tons.
Second class, 29,891.82 tons.

Deducting the tonnage from the King side gives us the following ore extraction from the Alliance side, including of necessity, all stopes worked on the Alliance side in 1915:

First class, 1,542 tons.
Second class, 15,840 tons.

Mr. Taylor then deducts from the total first class on the Alliance side in this year 5.24 tons of first class and 260.43 tons of second class, finding thus that there came from the Alliance side in the year 1915, tonnage as follows:

First class, 1,536.76 tons.
Second class, 15,579.57 tons.

(See his summary under 1915, page 412 of printed record.)

It will be seen that Mr. Taylor's figures last given represent, according to his contention, all the ore extracted in 1915, on the Alliance side, except 5 cars of first class and 342 cars of second class,

shown in Exhibit 48, (page 518 of the printed record) from 616 places confessedly other than the 600 stopes or 700 stopes.

Mr. Taylor reduces these cars to tons by calculations found in paragraph 2 on page 411 of the printed record.

It is now obvious that Mr. Taylor is wrong in crediting to the three 600 stopes, considered by him, 1,536.76 tons of first class and 15,579.57 tons of second class, unless the evidence shows that all the ore which came from the Alliance side in 1915, disregarding the small deduction above noted, came from the 600 stopes.

By a process of elimination Mr. Taylor finds the tonnage that came from the Alliance side in 1915, but this process of elimination did not enable him to find from what stopes on the Alliance side worked in this year this tonnage came.

We earnestly insist that the ore extracted on the Alliance side in 1915, did not come exclusively from the 600 stopes, and the three places from which came the five cars of first class and the 342 cars of second class, deducted by Mr. Taylor.

We submit that if any witness for either party undertakes to determine the cubic feet per ton occupied by the ore in place, by referring to the testimony as to the dimensions of a particular excavation, the burden is upon him to show where in the testimony the data is found for a finding as to the number of tons extracted from such excavation. This proposition is not based upon the general rule of law as to where the burden of proof rests as to the ultimate facts in the case. When we seek to demonstrate anything mathematically we must prove the correctness of our premises. We should not leave our premises in doubt. If we do our conclusions must be rejected.

If Mr. Taylor had had any personal knowledge as to the tonnage that came from the three 600 stopes, and had been examined as a witness with respect to such knowledge, and had given testimony upon his oath that all the ore extracted from the Alliance side in 1915, (except the small quantity deducted by him) came from the 600 stopes, we would not now be making this argument, because then the testimony upon the point we would admit was conflicting, but Mr. Taylor had no knowledge and did not pretend to testify from his knowledge.

A reading of his testimony (pages 410 and 411 of the printed record) shows that he assumed that all the ore on the Alliance side extracted in 1915, (except the small quantity which he deducted) came from the 600 stopes. He therefore must have assumed that the only stopes worked on the Alliance side in 1915, were these three 600 stopes. No witness in the case testified that these were the only stopes worked on the Alliance side in that year. Nothing in the evidence justifies such a conclusion or inference; on the contrary, there is positive and affirmative evidence that all the 617 ore extracted on the Alliance side in 1915, did not come from the cavities considered by Mr. Taylor. Let us see if this statement is not supported by the record.

The record shows that during the course of the trial while Mr. James Humes was upon the witness stand he testified as follows:

"I have brought here the reports * * * for 1915, that Mr. Critchlow called for. * * * This document that I next hand you is my report to the General Manager for the year 1915. (Exhibit 92 marked by the reporter.)"

Referring to this exhibit, which is found at page 537 of the printed record, we discover that under the heading "Alliance section," there were taken from the 700 level in the year 1915, 10.49 tons of first class, and 1,224.36 tons of second class.

Let it be noted right here that Mr. Taylor by his process of elimination ascertained without any reference to this report that the exact number of tons of second class extracted from the entire mine in 1915, was 45,734 tons, the exact number of tons shown in Mr. Humes' report to the General Manager, called for and introduced at the suggestion of our adversaries.

In this total we find 1,224.36 tons coming from the 700 level, which tonnage, of course, was extracted entirely outside of the three stopes considered by Mr. Taylor.

It is incredible to us that the trial court had any doubt of the correctness of this report to the General Manager, or assumed that this 1,224.36 tons of second class ore came from the 600 stopes. We do not believe Mr. Taylor would have had any doubt that this 1,224.36 tons came from the 700 level and not from the 600 stopes, if his attention had been called to the report to the General Manager. We concede that his attention was not called to it, but it is a fact established in the case beyond controversy. It is evidence that ought not to be rejected. It is certain that if Mr. Taylor's attention had been called to it he would have deducted from the total given in his summary of second class ore for 1915, 1,224.36 tons, and also would have deducted 10.49 tons of first class which came from the 700 level, according to Mr. Humes' report, from the total of 1,536.76 tons of first class credited by Mr. Taylor to the 600 stopes for this year.

Mr. Humes' total here of 45,734 tons of second class from the entire mine in 1915, agrees exactly with Mr. Taylor's determination of second class tonnage for this year.

It does not seem to us to be fair or reasonable to adopt a conclusion upon this important question of space per ton occupied by the ore in place in the mine, by compressing this 1,224.36 tons of ore from the stopes on the 700 level into the 600 stopes. The consequence of doing so works a great injustice to the appellant in this case. The extent of that injustice we will shortly demonstrate.

It is to be borne in mind that in 1912, the ground from which all the ore in controversy came was awarded by the solemn decree of the trial court to the appellant here. The ore now under discussion and reported in Mr. Humes' report to the General Manager, was mined in the year 1915, before the decision of the trial court had been reversed. Mr. Taylor himself proves that the report is correct as to the total tonnage of second class ore extracted in 1915, from the entire mine.

What possible motive can be suggested why Mr. Humes in his report to the General Manager of operations in 1915 should state that 1224.36 tons were mined off the 700 level on the Alliance side, if in fact this ore had been mined from the three 600 stopes considered in the testimony of Mr. Taylor? This report was brought into the Court and introduced in evidence at the suggestion of counsel upon the other side. It seems to use that it makes our contention incontestible that there must be deducted from the total of 15,579.57 tons of second class contained in Mr. Taylor's summary (page 412 of the printed record), 1,224.36 tons, leaving, as before stated, 14,355.21.

We earnestly contend that Taylor's summary, given on page 412, should be reconstructed as follows:

1914:

227.40 tons of first class.
1,981.32 tons of second class.

1915:

1,526.27 tons of first class.
14,355.21 tons of second class.

1916:

No first class.
1,655.50 tons of second class.

(For the purpose of our argument here we will assume the correctness of the tonnage given for 1916.)

Making the total production for those three years from the 600 stopes considered by Mr. Taylor, not exceeding 1,753.67 tons of first class and 17,992.02 tons of second class.

It will be remembered now that Mr. Taylor testified that he ascertained by experiment the number by which to multiply the first class ore and the number by which to multiply the second class ore in order to fill the cavity.—183,523 cubic feet, minus one-seventh equals 157,306 cubic feet.

619 Now, adopting two numbers which have the same relation to each other approximately as 6 has to 7.62 (6.5 and 8.109), we find that the ore cavity, 157,306 cubic feet, is fully accounted for. 1,753.67 tons of first class multiplied by 6.5 equals 11,398.85 cubic feet.

This leaves 145,907.15 cubic feet for the second class ore.

17,992.02 (tons of second class) multiplied by 8.109 equals 145,897.29, a difference of less than 10 cubic feet.

The appellant very earnestly submits to the Court that making the necessary corrections in Mr. Taylor's figures, and deducting the tonnage which came in 1915, from the 700 stopes, instead of the three 600 stopes considered by Mr. Taylor, it necessarily results that the appellant is entitled to a finding that first class ore occupied

not less than 6.5 cubic feet to the ton, and second class ore not less than 8.109 cubic feet to the ton.

It does not seem to us that it is possible seriously to dispute the appellant's proposition that the Court should not allow the ratio of 6 to 7.62 to stand in the face of the indisputable fact that they have been arrived at by the number of errors in addition and subtraction, and by including in Mr. Taylor's ore cavity 1,224.36 tons of ore which, beyond all reasonable controversy, did not come from the 600 stopes.

We conceive that this learned court has misapprehended our contention. Your Honors say:

"It is, however, difficult to believe that Mr. Brooks was either ignorant of the facts or in error in his testimony on this subject. * * * There was no suggestion by that company (the appellant) in the examination of Brooks or Taylor that the testimony as to the number of tons or as to the number of cubic feet in the 600 stope(s) was either false or inaccurate. Taylor took the number given by Brooks, made his proof on that basis, and now the King Company insists it is no proof because its witness was mistaken and the testimony he gave was erroneous."

We do not claim that Mr. Brooks' testimony was erroneous upon this subject, but we beg leave to point out that Mr. Brooks did not testify as to the number of tons of ore extracted from the 600 stopes. Neither did Mr. Taylor testify as to the number of tons contained in these stopes. He assumes, it is perfectly evident from the reading of his testimony, that all the ore extracted on the Alliance side in 1915, except 5 cars of first class and 342 cars of second class, came from the 600 stopes. There is not a syllable of testimony in the record as to the stopes from which all the ore extracted in 1915, 620 came, except the general manager's report for that year, and the ore extraction record books. Let us repeat, that as to the total second class ore extracted on the Alliance side in 1915, Mr. Taylor finds it to be, within a half a ton, identical with the number of tons of second class ore as given in Mr. Humes' report, which includes the 1,224.36 tons taken from the 700 level.

We do not at this time ask this Honorable Court to reject any of the testimony of Mr. Brooks. We do not here ask the Court to reject a single statement of fact made by Mr. Taylor. For the purpose of the point we are attempting to make it is not necessary for us to do so. All that we ask under the heading we are now discussing is, that the corrections which we have pointed out be made in Mr. Taylor's calculations, and that there be subtracted from his second class tonnage from the 600 stopes in the year 1915, 1,224.36 tons, plainly shown to have come from the 700 stopes.

It is true that Mr. Brooks "testified in much detail regarding the 600 stopes—that is to say, the stopes below the 500 level from which ore came out of the Conklings through the place where the tonnage was recorded in 1914, 1915 and 1916, * * * and that there

were no other stopes, the material of which came on through the 600 level during those years."

There is nothing in the testimony of Mr. Taylor or Mr. Brooks inconsistent with the truth of the statement in the general manager's report as to the tonnage which came in 1915, from the 700 level. While Mr. Brooks testified that the excavations containing 185,523 cubic feet produced all the ore which went out along the 600 level, he did not testify that all the ore that came out in 1915, came out through the 600 level. Ore from the 700 level, of course, did not come from the 600 stopes.

Not only is there nothing to dispute the statement in the general manager's report of ore taken from the 700 level in 1915, but there is testimony which corroborates it.

The testimony of Mr. Brooks, we concede—we not only concede it but we insist upon it—proves that all the material which came from the three 600 stopes considered by Mr. Taylor came from the 600 level. Ore coming from other places in 1915 did not come out of the 600 level, but came up from the 700 level.

Not only is there no testimony which throws any doubt upon the statement in the general manager's report that in 1915 the tonnage we have mentioned came from the 700 level, but there is much to corroborate Mr. Humes' report upon this point. All testimony which tends to show that other stopes were worked in 1915, besides the 600 stopes, is testimony tending to corroborate Mr. Humes' report as to the ore that came from the 700 level.

Now, bearing in mind that no ore came from the 600,
621 according to Mr. Brooks' testimony, in 1915, except such as came from Mr. Taylor's three 600 stopes, designated as the "600 stope," "600 Middle" stope and "600 Top" stope, we call attention to the following testimony, all of which is wholly uncontradicted:

Mr. O'Neil testified (referring to Exhibit 3):

"Here is the 704 drift. We were working in that some time the latter part of 1915, or the beginning of 1916, I think. The ore was taken out of the 704 drift about February or March, 1916, I think * * * We struck some good ore just before we quit the 704 raise stope. We quit working in the 704 raise stope at the time we got notice of the decision of the Court of Appeals. * * * The 604 (704) stope, I think, was about 50 or 60 feet above the 600 level. The ore was taken to the Silver Hill shaft."

"Referring to the map which shows * * * 700 stope, the 704 stope, I am familiar with all of those * * * I think we worked the 700 drift somewhere about the beginning of 1916. The top of the 700 drift stope is now accessible and entered very easily. * * * The 700 drift stope is about 8 feet above the track level and about 5 or 6 feet below, about 12 or 15 feet long. The streak of ore is about 18 inches or 2 feet wide at the widest point. Mr. Anderson and Mr. Brooks surveyed there after the decision of the Court of Appeals, and I told them how much waste there was in there." (Printed record, pages 262, 263, 264.)

The 700 drift stope, referred to by Mr. O'Neil above, as being about 8 feet above the track and about 5 or 6 feet below, is doubtless the "700 level drifting through ore," referred to by Mr. Brooks in his testimony. (Page 265 of printed record, line 25.)

Mr. Harry J. Humes said: That he went to work for the appellee in 1915, as shift boss on the Alliance side; that he never knew anything about the so-called Elephant stope. Proceeding, he said:

"Referring to the stopes below, generally spoken of as 'the 600,' I will say that the 600 sill stope and the 600 middle stope were exhausted when I went there as shift boss. The stopes worked under my supervision were the 600 top stope, the 704 top stope. The 704 drift stope was worked out. I kept a proper record of the number of cars that went out on my shifts. . . . The ore that came from the 600, 700 and 900 would be taken up the Silver Hill shaft to the 500 level." (Printed record, page 268.)

Mr. Con O'Neil also testified that he took some ore in 1915, from the 700—in 1915 and 1916. "I do not know what part of it came from within the Conklings ground. The ore in the stopes from the 700 was about the same as that from the 600 stopes. The ore extraction books show what came from the 700."

Mr. Humes in his report of the operations ending December 31, 1915, makes specific reference under the heading "Alliance Section," to the ore body on the 200 level. He says:

Ore (on) the 200 level the ore body looks better at the present time than at any time in the past."

Mr. Humes' testimony shows that the 200 level here referred to is the 700 of the Alliance. (See printed record, page 307.) Mr. Humes is undoubtedly here referring to the ore body from which he reports this 1,224.36 tons of second-class ore came, in his tabulation of total second class ore extracted from the Alliance side.

In addition to all the foregoing testimony which shows that the 1,224.36 tons of ore did not come from the three 600 stopes considered by Mr. Taylor, an examination of the appellant's ore extraction books for the year 1915, discloses that there came from the 700 level on the Alliance side in that year 25 cars of first class ore and 1906 cars of second class ore.

These ore extraction books are Exhibits 123 to 139, and were made a part of the record in this cause, as will be seen by reference to the certificate of the trial judge approving the statement of the evidence for use on the appeal. The books, however, were not actually sent up to this court as a part of the record, because the clerk of the trial court mislaid these exhibits, and they were not found until after the decision of the cause upon this appeal. The appellant has prepared a motion requesting this Honorable Court to require these books to be forwarded to this Court in order that they may be examined so

that there shall be left in the mind of the Court no manner of doubt that all the ore extracted from the Alliance side in 1915, did not come from the excavations considered by Mr. Taylor.

The adoption of 6.5 cubic feet per ton for first class, and 8.109 cubic feet for second class ore will result in the reduction in the amount of the judgment equal to \$53,311.45.

See the following tabulation:

Silver King Coalition Mines Co. v. Conkling Mining Co.

Alteration of Figures Caused by Taking First-class Ore at 6.5 c. f. and Second-class Ore at 8.1 c. f. per Ton Instead of 6.0 c. f. and 7.62 c. f. (Pr. Rec., p. 474, Court's Findings).

1907.

659,155 K. K. 1st class @ 6.5 c.f.....	\$4,284.50
724.68 K. K. 2nd class @ 8.10 c.f. or.....	5,869.90
252.07 tons concentrates.	

\$10,154.40

623 50,000-10,154-39,846 1st and 2nd class.

In equal tonnage this supplies at 6.5 c. f. for 1st class and 8.1 c. f. for 2nd class.

2,729.17 1st class.

2,729.17 2nd class or 949.27 tons concentrates.

949.27 tons at 31.9%—302.81 tons slimes.

Value of product:

2,729.17 tons at \$38.72.....	\$105,673.46
949.27 tons at \$44.81.....	42,536.78
302.81 tons at \$3.85.....	1,165.81

\$149,376.05

Add amount received for K. K. shipments per report. \$31,918.87

Total values \$181,294.92

Less costs:

Mining 6,842.17 tons at \$4.50.....	\$30,789.76
Milling 3,453.85 tons at \$1.10.....	3,799.24
Sampling and Trimming 4,588.66 tons at \$0.421	1,932.25
Development	4,335.59
Debit from May 1st, 1907.....	29,705.86
	\$70,562.70

Balance January 1st, 1908..... \$110,732.22

Page 474 of printed record.

1908.

Volume 37,120 cu. ft.

1st class one-third.....	1,635.24 tons
2nd class two-thirds.....	3,270.48 tons
	1,137.55 tons concentrates
Slimes at 18.05%.....	205.32

Value of Product:

1,635.24 tons at \$46.42.....	\$75,907.84
1,137.55 tons at \$37.93.....	43,147.27
205.32 tons at \$3.44.....	706.30

\$119,761.41

Less costs:

Mining 4,905.72 tons at \$4.50.....	\$22,075.74
Milling 3,270.48 tons at \$1.10.....	3,597.53
Sampling and Trammings 2,772.79 tons at \$.42	1,167.34
Development	4,161.16
	<hr/> \$31,001.77
Balance	\$88,759.64

624 Page 475, line 19, printed record.

1909.

1,226.4 tons first class at 6.5 c. ft.....	7,971.6
9,853.8 tons first class at 8.10 c. ft.....	79,815.78
	<hr/> 87,787.38

Total c. f. accounted for by cars 1909 and 1910.

114,557.1 cu. ft. minus 87,787.38 equals 26,769.72 c. f. of ore remaining in cavity.

26,769.72 cu. ft. at 8.91% equals

2,385.18 cu. ft. 1st class.

26,769.72 cu. ft. at 91.09% equals

24,384.53 cu. ft. 2nd class—8.10—3,010.43 tons.

2,385.18 cu. ft. divided by 6.5 cu. ft. per ton equals 366.95 tons

1st class (cavity).

3,010.43 tons divided by 2,875 (ratio of concentrates) equals

1,047.10 tons.

1909.

1st class accounted for, cars.....	928.2	
1st class accounted for by cavity.....	366.95	
	<hr/>	
	1,295.15	
1,295.15 tons 1st class at \$40.79 per ton.....		\$52,829.16
8,952 cars 2nd class equals 7,385.4 tons		
7,385.4 tons divided by 2.875 (ratio concentrates) equals (tons).....	2,568.83	
Tons accounted for by cavity (cons.).	1,047.10	
	<hr/>	
	3,615.93	\$135,199.62
		<hr/>
3,615.93 tons cons. at \$37.39 per ton.....		\$188,028.78

Less costs:

Mining 11,690.95 tons at \$4.50.....	\$52,609.28	
Milling 10,395.8 tons at \$1.10.....	11,435.38	
Sampling and Tramming 4,911.08 tons at \$0.42	2,067.56	
	190.00	
	380.00	
	210.00	
	120.00	
	<hr/>	
		\$67,012.22

Balance January 1, 1910..... \$121,016.56

Page 476 of printed record.

1910.

No alteration.

625

1913.

Page 477, 5th line.

80 x 2100 divided by 2000 x 6.5.....	546	c. f. 1st class
174 x 1650 divided by 2000 x 8.10.....	1,162.75	c. f. 2nd class
1st class.....	31.95 %	
2nd class.....	68.05 %	
31.95% of 3861 divided by 6.5.....	189.78	tons first class
68.05% of 3861 divided by 8.1.....	324.37	tons 2nd class
	112.82	tons concentrates

Values:

189.78 tons at \$39.61.....	\$7,517.18
112.82 tons at \$26.67.....	3,008.90
	<hr/>
Total	\$10,526.08

Less costs:

Mining 514.15 tons at \$4.50.....	\$2,313.68	
Milling 324.37 tons at \$1.10.....	356.81	
Sampling and Trammings 302.50 tons at \$.421	127.35	
Development	1,944.00	
	<hr/>	\$4,741.84
Balance December 31, 1913.....		\$5,784.24

Page 478, first line of printed record.

1914.

682.85 tons at 6.5 c. f.	4,438.52	
1,772 tons at 8.1 c. f.	14,353.20	
	<hr/>	18,791.72
Excavation in Conklings.....	18,246 c. f.	
Less Waste	2,606	
	<hr/>	15,640

15,640 divided by 18,791.72	83.22 %	
682.85 x 83.22%	568.26 tons 1st class	
1,772 x 83.22%	1,474.66 tons 2nd class	
	512.92 tons concentrates	

Values:

568.26 tons at \$35.42.....	\$20,127.76	
512.92 tons at \$22.28.....	11,427.85	
Total	<hr/>	\$31,555.61

626 Less costs:

Mining 2,042.92 tons at \$4.50.....	\$9,193.14	
Milling 1,474.66 tons at \$1.10.....	1,622.13	
Sampling and Trammings 1,081.18 tons at \$.421	455.18	
Development	6,457.00	
	<hr/>	\$17,727.45
		<hr/>
		\$13,828.16

Page 479 of printed record.

1916.

Excavation	16,410 c. f.
Less waste	2,344 c. f.

Ore cavity 14,066 c. f.

14,065.7 divided by 8.10..... 1,736.50 tons 2nd class
604 tons concentrates

Values:

604 at \$39.48 \$23,845.92

Less costs:

Mining 1,736.50 tons at \$4.50.....	\$7,814.25	
Milling 1,736.50 tons at \$1.10.....	1,910.15	
Sampling and Trammings 604.0 tons at \$0.421	254.28	
Development	1,150.00	
		\$11,128.68
		<u>\$12,717.24</u>

Page 478 of printed record, 9th line from bottom.

1915.

358.84 tons at 6.5 c. f.....	2,332.46
3,621.39 tons at 8.1 c. f.....	29,333.25

31,665.71

Conkling Excavation	42.242	c. f.
Less Waste 1/7	36,208	c. f. of ore
36,208 divided by 31,665.71	114.3	%
358.84 x 114.3%	410.15	tons 1st class
3,621.39 x 114.3%	4,139.24	tons 2nd class
	1,439.73	concentrates

Value:

410.15 tons at \$36.77.....	\$15,081.21
1,439.73 tons at \$30.25.....	43,551.83

Total \$58,633.04

627 Less costs:

Mining 4,549.39 tons at \$4.50.....	\$20,472.25	
Milling 4,139.24 tons at \$1.10.....	4,553.16	
Sampling and Trammings 1,849.88 tons at \$0.421.....	778.80	
Development	2,078.00	
		\$27,882.21
		<u>\$30,750.83</u>

Summary.

	Values per report.	Values altered.	Amount of reduction.	Simple int. at 8% to Mar. 1, 1918.
1907	\$121,576.28	\$110,732.22	\$10,844.06	\$8,820.10
1908	95,147.74	88,759.64	6,388.10	4,684.63
1909	130,971.86	121,016.56	9,955.30	6,504.00
1910	No alteration.			
1913	6,325.28	5,784.24	541.04	180.34
1914	15,432.99	13,828.16	1,604.83	406.53
1915	32,818.47	30,750.83	2,067.64	358.39
1916	13,592.08	12,717.24	874.84	81.65
	<hr/> \$415,864.70	<hr/> \$383,588.89	<hr/> \$32,275.81	<hr/> \$21,035.64
Add Int.			<hr/> 21,035.64	
			<hr/> \$53,311.45	

Wherefore, appellant prays this Honorable Court for a rehearing upon the question of the value of the Conklings ore and the volume thereof, as determined by the cubic feet per ton occupied by first and second class ore in place in the mine.

W. H. DICKSON,
A. C. ELLIS, JR.,
R. G. LUCAS,
T. MARIONEUX,
Solicitors for Appellant.

628

UNITED STATES OF AMERICA.

STATE OF UTAH,

Salt Lake County, ss:

We, W. H. Dickson, A. C. Ellis, Jr., and Thomas Marioneaux, of counsel for the petitioner and appellant in the above entitled cause, do hereby certify that we believe error is found in the decision of this Honorable Court in respect to the volume of ore extracted, and in respect to the value thereof, as proved by the evidence, and that a rehearing should be granted in order that justice may be done.

W. H. DICKSON,
A. C. ELLIS, JR.,
THOMAS MARIONEUX.

Dated Salt Lake City, Utah, January —, 1919.

(Endorsed:) Filed in U. S. Circuit Court of Appeals Feb. 11, 1919.

629 (*Motion to Send Up Additional Parts of the Record and Affidavits in Support Thereof.*)

In the United States Circuit Court of Appeals, Eighth Circuit.

No. 5188.

SILVER KING COALITION MINES COMPANY, Appellant.

VS.

CONKLING MINING COMPANY, Appellee.

Motion.

Now comes the above named appellant, Silver King Coalition Mines Company, and prays this Honorable Court for an order requiring the Clerk of the United States District Court, in and for the District of Utah, to send up to this Court the following part of the record herein, namely: Exhibits 124 to 133 and 140, being the ore extraction record kept by the appellant company of all ores extracted on the Alliance side in the year 1915, which were introduced in evidence at the trial and, except 140, are included in the judge's certificate as part of the record herein.

This appellant states that it has served and filed herein a petition for a rehearing, in which, among other things, it is contended that the trial court and this Honorable Court have decided that first class ore occupied in place in the mine 6 cubic feet per ton, and second class ore occupied in place in the mine 7.62 cubic feet per ton, and that this conclusion is based upon the number of tons of ore assumed to have been extracted from three certain stopes called the "600 stopes," above the 600 level; whereas, in truth and in fact the record shows a report by James Humes to the General Manager of the appellant company of operations during the year 1915, in which report it is stated that there were extracted from the 700 level, on the Alliance side, and therefore entirely outside the 600 stopes, during the year 1915, 10 tons of first class ore, and 1224.36 tons of second class ore; and that if this latter tonnage from the 700 level be eliminated from the tonnage assumed to have come from the 600 stopes, it must then be found that if first class ore occupied in place 6 cubic feet per ton, the second class ore must have occupied 8.15 cubic feet per ton;

and also with the tonnage from the 700 level eliminated, 630 and adopting two ratios for first and second class ore which bear the same relation to each other approximately as 6 bears to 7.62, it will be found that the first class ore occupied 6.5 cubic feet per ton, and the second class ore 8.10 cubic feet per ton.

This appellant further says that no application for diminution of the record in the respect aforesaid was made heretofore because, as shown by the affidavit of Thomas Marioneaux, one of its coun-

sel, and by John W. Christy, the Clerk of the District Court, said exhibits had been mislaid and the whereabouts of the same was not discovered until about ten days after the decision of this cause in this Honorable Court, all of which appears by affidavits attached hereto.

SILVER KING COALITION MINES CO.,

Appellant.

By F. J. WESTCOTT,

Secretary.

W. H. DICKSON,

A. C. ELLIS, JR.,

R. G. LUCAS,

T. MARIONEUX,

Solicitors for Appellant.

631 In the United States Circuit Court of Appeals, Eighth Circuit.

No. 5188.

SILVER KING COALITION MINES COMPANY, Appellant,

vs.

CONKLING MINING COMPANY, Appellee.

Affidavit of Frank J. Westcott upon Application to Send Up Additional Parts of the Record.

STATE OF UTAH,

County of Salt Lake, ss:

F. J. Westcott, being first duly sworn on his oath, says:

That he is a citizen of the United States and a resident of Salt Lake City, State of Utah; that he has been for ten years and now is Secretary of the Silver King Coalition Mines Company, the above named appellant.

Affiant further says that on January 16, 1919, at the instance of counsel for appellant, he examined the ore extraction record for each month of the year 1915, commonly referred to in the testimony of this cause as the shift bosses' books, said books being Exhibits from 124 to 133, and 140.

Affiant further says that said books are so ruled as to afford a blank space in which to set down the number of cars of first class and second class extracted from the various levels of the mine, and showing the shift upon which the cars were taken out.

Affiant further says that he has carefully examined the said exhibits with a view to ascertaining the total number of cars of first and second class ore appearing of record in said ore extraction books as having been extracted from the 700 level on the Alliance side in the year 1915, and that the total number of cars according to said books, extracted in 1915, from the 700 level is as follows:

First class, 25 cars.

Second class, 1906 cars.

Affiant further says that he has read the affidavit of Thomas Marioneaux with respect to the manner in which this affiant came into the possession of said books, and this affiant says the statements in said affidavit are correct, and that said books are in exactly the same condition in which they were when affiant received them from the said John W. Chirsty, and affiant has not changed or altered a single figure in the said books; that said books have been in the exclusive possession of affiant since the time he received the same from the said Clerk as aforesaid, until January 20th, 1919, when affiant returned the books to said Clerk.

Further affiant sayeth not.

F. J. WESTCOTT.

Subscribed and sworn to before me this 24th day of January, 1919.

[SEAL.]

CLARENCE M. BECK,

Notary Public.

My commission expires December 17, 1919.

633 In the United States Circuit Court of Appeals, Eighth Circuit
No. 5188.

SILVER KING COALITION MINES COMPANY, Appellant,

vs.

CONKLING MINING COMPANY, Appellee.

Affidavit of Thomas Marioneaux.

STATE OF UTAH,

County of Salt Lake, ss:

Thomas Marioneaux, being first duly sworn on his oath, says:

That he is one of the counsel for the appellant in the above entitled cause.

Affiant further says that upon the appeal of the Silver King Coalition Mines Company to this Honorable Court, it was the intention of counsel for appellant to send up as part of the record, exhibits numbered 123 to 139, being the ore extraction books, giving the record of cars of first and second class ore extracted on the Alliance side in the year 1915, and counsel for appellant had incorporated in the Judge's certificate, as will appear by an inspection thereof, a reference to the said exhibits making them technically a part of the record.

Affiant further says that after the certificate of the learned Judge of the trial court had been made, and counsel for appellant had demanded that the exhibits referred to in the said certificate be sent to this Honorable Court, Mr. John W. Christy, the Clerk of the trial court, insisted that said exhibits were not in his possession, and upon affiant's insisting that they were in his possession, said Clerk

informed affiant that he had made most thorough and diligent search in the office for said exhibits and had been unable to find the same, and was certain that they could not be found in said office.

Affiant further says that thereupon inquiry was made in other quarters in which said exhibits were likely to be found, and that all inquiry proved fruitless, whereupon the record was sent up without said exhibits.

634 This affiant further says that after the decision of this Honorable Court in this cause had been handed down, he was one day called on the telephone by John W. Christy, the Clerk of the trial court, who thereupon informed this affiant that the above mentioned exhibits, showing the ore extraction for the year 1915, as aforesaid, had at last been found, and that affiant might have the same if he desired them; whereupon affiant says that he told the said Clerk that while he might wish to examine them, there was no hurry about it, but to keep them where they would not be again mislaid. Affiant says that at the time of this conversation he had not yet received a copy of the opinion of this Court.

Affiant further says that in preparing a petition for a rehearing in this cause, it occurred to him to have the said exhibits examined, and he proceeded to the office of the Clerk of the Federal Court in order to make such an examination, and was there informed by Mr. Christy that he thought there was no further occasion for his retaining possession of the said exhibits, and seeing Mr. Westcott on the street invited him to the Clerk's office and there gave the said exhibits into his possession as the property of the appellant company.

Affiant further says that he thereupon repaired to the office of the Silver King Coalition Mines Company, and asked Mr. Westcott if he had received said exhibits, and promptly Mr. Westcott produced the same to affiant, and in the presence of said Westcott this affiant looked through the said exhibits to see whether they contained any record of ore extracted from the 700 level in 1915, and speedily observing that said books contained a record of a large number of cars of second class extracted in said year, this affiant requested Mr. Westcott to go through the said books in company with Mr. Humes, and ascertain how many cars of first class and how many cars of second class were shown thereby to have come from the 700 level in the year 1915, and thereafter Mr. Humes and Mr. Westcott furnished affiant a tabulation showing that there came, according to said exhibits, from the 700 stopes in the year 1915, ore as follows:

635

EXHIBIT 124.

1915.

	1st class, 700Y.	2nd class, 700Y.
February 10.....	0	10
11.....	0	5
12.....	0	13
13.....	0	18
14.....	0	9
15.....	0	13
16.....	0	3
17.....	0	3
18.....	0	3
19.....	0	1
20.....	2	0
21.....	0	2
22.....	0	5
23.....	0	4
24.....	0	14
25.....	0	0
26.....	0	4
27.....	0	0
28.....	0	0
	<hr/> 2	<hr/> 107

636

EXHIBIT 125.

March		1st class,	2nd class,
		700.	700.
1	.....	0	2
2	.....	0	1
3	.....	0	4
4	.....	0	1
5	.....	0	0
6	.....	0	0
7	.....	0	0
8	.....	0	0
9	.....	0	4
10	.....	0	0
11	.....	0	0
12	.....	0	0
13	.....	0	0
14	.....	0	0
15	.....	0	0
16	.....	0	0
17	.....	0	0
18	.....	0	0
19	.....	0	0
20	.....	0	0
21	.....	0	0
22	.....	0	0
23	.....	0	0
24	.....	0	0
25	.....	0	0
26	.....	0	0
27	.....	0	0
28	.....	0	0
29	.....	0	0
30	.....	0	0
31	.....	0	0
		1	0
		<hr/> 1	<hr/> 12

637

EXHIBIT 140.

		1st class, TONS.	2nd class, TONS.
April	1.....	0	0
	2.....	0	1
	3.....	0	4
	4.....	0	0
	5.....	0	2
	6.....	0	6
	7.....	0	9
	8.....	0	3
	9.....	0	3
	10.....	0	0
	11.....	0	2
	12.....	0	0
	13.....	0	0
	14.....	0	0
	15.....	0	0
	16.....	0	0
	17.....	0	0
	18.....	0	0
	19.....	0	0
	20.....	0	0
	21.....	0	0
	22.....	0	0
	23.....	0	2
	24.....	0	0
	25.....	0	0
	26.....	0	0
	27.....	0	0
	28.....	0	0
	29.....	0	0
	30.....	0	0
		<hr/> 0	<hr/> 32

638

EXHIBIT 126.

May		1st class,	2nd class,
		TOT.	TOT.
9	.....	0	5
10	.....	0	4
11	.....	0	10
12	.....	0	10
13	.....	1	12
14	.....	0	9
15	.....	0	17
16	.....	0	16
17	.....	0	15
18	.....	0	13
19	.....	0	18
20	.....	0	12
21	.....	1	8
22	.....	2	14
23	.....	0	7
24	.....	0	12
25	.....	1	7
26	.....	0	2
27	.....	0	16
28	.....	0	2
29	.....	1	0
30	.....	10	0
31	.....	0	0
		<hr/>	<hr/>
		16	209

639

EXHIBIT 127.

June		1st class,	2nd class,
		TON.	TON.
1	.....	0	3
2	.....	0	4
3	.....	0	4
4	.....	1	3
5	.....	0	10
6	.....	0	1
7	.....	0	0
8	.....	0	0
9	.....	0	4
10	.....	0	1
11	.....	0	5
12	.....	0	7
13	.....	0	0
14	.....	0	0
15	.....	0	0
16	.....	0	0
17	.....	1	3
18	.....	0	2
19	.....	0	7
20	.....	0	6
21	.....	0	3
22	.....	0	1
23	.....	0	0
24	.....	0	0
25	.....	0	0
26	.....	0	0
27	.....	0	0
28	.....	0	0
29	.....	0	0
30	.....	0	0
		<hr/> 2	<hr/> 64

640

EXHIBIT 128.

July		1st class,	2nd class,
		TON.	TON.
1	.....	0	0
2	.....	0	0
3	.....	0	2
4	.....	0	0
5	.....	0	1
6	.....	0	0
7	.....	0	0
8	.....	0	0
9	.....	0	0
10	.....	0	0
11	.....	0	0
12	.....	0	0
13	.....	4	0
14	.....	0	0
15	.....	0	0
16	.....	0	0
17	.....	0	0
18	.....	0	0
19	.....	0	1
20	.....	0	0
21	.....	0	2
22	.....	0	2
23	.....	0	4
24	.....	0	4
25	.....	0	3
26	.....	0	6
27	.....	0	8
28	.....	0	6
29	.....	0	8
30	.....	0	9
31	.....	0	8
		<hr/> 4	<hr/> 74

641

EXHIBIT 129.

		1st class, 700'.	2nd class, 700'.
August	1.....	0	2
	2.....	0	0
	3.....	0	1
	4.....	0	9
	5.....	0	14
	6.....	0	9
	7.....	0	7
	8.....	0	0
	9.....	0	0
	10.....	0	0
	11.....	0	1
	12.....	0	0
	13.....	0	0
	14.....	0	0
	15.....	0	0
	16.....	0	0
	17.....	0	0
	18.....	0	0
	19.....	0	0
	20.....	0	5
	21.....	0	15
	22.....	0	2
	23.....	0	5
	24.....	0	6
	25.....	0	6
	26.....	0	6
	27.....	0	16
	28.....	0	10
	29.....	0	8
	30.....	0	18
	31.....	0	19
		<hr/> 0	<hr/> 159

642

EXHIBIT 130.

		1st class, 700'.	2nd class, 700'.
September	1.....	0	16
	2.....	0	4
	3.....	0	10
	4.....	0	10
	5.....	0	0
	6.....	0	0
	7.....	0	6
	8.....	0	3
	9.....	0	6
	10.....	0	0
	11.....	0	0
	12.....	0	0
	13.....	0	0
	14.....	0	5
	15.....	0	6
	16.....	0	4
	17.....	0	16
	18.....	0	13
	19.....	0	10
	20.....	0	19
	21.....	0	16
	22.....	0	7
	23.....	0	5
	24.....	0	17
	25.....	0	19
	26.....	0	10
	27.....	0	13
	28.....	0	11
	29.....	0	11
	30.....	0	10
		<hr/> 0	<hr/> 247

643

EXHIBIT 131.

		1st class, 700'.	2nd class, 700'.
October	1.....	0	6
	2.....	0	5
	3.....	0	4
	4.....	0	7
	5.....	0	3
	6.....	0	10
	7.....	0	6
	8.....	0	0
	9.....	0	0
	10.....	0	10
	11.....	0	0
	12.....	0	0
	13.....	0	0
	14.....	0	0
	15.....	0	0
	16.....	0	0
	17.....	0	8
	18.....	0	10
	19.....	0	15
	20.....	0	4
	21.....	0	0
	22.....	0	5
	23.....	0	0
	24.....	0	11
	25.....	0	7
	26.....	0	0
		<hr/> 0	<hr/> 111

At this date labor strike occurred.

Operations resumed Nov. 10, 1915, after settlement of strike.

644

EXHIBIT 132.

	1st class, 700'.	2nd class, 700'.
November 10.....	0	1
11.....	0	42
12.....	0	1
13.....	0	0
14.....	0	0
15.....	0	0
16.....	0	0
17.....	0	0
18.....	0	0
19.....	0	0
20.....	0	4
21.....	0	24
22.....	0	16
23.....	0	6
24.....	0	19
25.....	0	14
26.....	0	16
27.....	0	32
28.....	0	3
29.....	0	39
30.....	0	30
	<hr/> 0	<hr/> 247

645

EXHIBIT 133.

		1st class, 700'.	2nd class, 700'.
December	1.....	0	23
	2.....	0	16
	3.....	0	29
	4.....	0	23
	5.....	0	24
	6.....	0	18
	7.....	0	31
	8.....	0	1
	9.....	0	25
	10.....	0	21
	11.....	0	20
	12.....	0	27
	13.....	0	9
	14.....	0	13
	15.....	0	12
	16.....	0	14
	17.....	0	12
	18.....	0	14
	19.....	0	32
	20.....	0	29
	21.....	0	22
	22.....	0	9
	23.....	0	23
	24.....	0	57
	25.....	0	0
	26.....	0	4
	27.....	0	27
	28.....	0	23
	29.....	0	29
	30.....	0	28
	31.....	0	29
		<hr/> 0	<hr/> 644

646

Summary.

	1st class, 700'.	2nd class, 700'.
January	0	0
February	2	107
March	1	12
April	0	32
May	16	209
June	2	64
July	4	74
August	0	159
September	0	247
October	0	111
November	0	247
December	0	644
Total	25	1906

Affiant further says that after having been furnished the tabulation showing the figures above given, he requested said Westcott to compare them with the said ore extraction record, Exhibits 124 to 134, and Exhibit 140, aforesaid, and that thereafter said Westcott did make said comparison and signed and took the affidavit dated January 22d, 1919, and which has been filed herein, to the effect that said ore extraction record shows that there was taken from the 700 level on the Alliance side in the year 1915, 25 cars of first class and 1906 cars of second class ore.

Further affiant sayeth not.

THOMAS MARIONEUX.

Subscribed and sworn to before me this 24th day of January, 1919.

[SEAL.]

CLARENCE M. BECK,
Notary Public.

My commission expires December 17, 1919.

647 In the United States Circuit Court of Appeals, Eighth Circuit.

No. 5188.

SILVER KING COALITION MINES COMPANY, Appellant,

vs.

CONKLING MINING COMPANY, Appellee.

Affidavit of John W. Christy.

STATE OF UTAH,

County of Salt Lake, ss:

John W. Christy, being first duly sworn on his oath, says:

That he is now and at all the times hereinafter mentioned was the Clerk of the United States District Court in and for the District of Utah, presided over by Hon. Tillman D. Johnson.

Affiant further says that during the trial of said cause before his Honor, Judge Johnson, this affiant was constantly present, and that Exhibits 123 to 140, omitting 139, the ore extraction record of the Silver King Coalition Mines Company, Alliance side, for the year 1915, were given into the possession of this affiant that they might be safely kept.

Affiant further says that after the record on appeal had been made up in this cause this affiant was requested by Thomas Marioneaux, one of the counsel for the appellant, Silver King Coalition Mines Company, by precipe, to send up to the Honorable Circuit Court of Appeals for the Eighth Circuit, Exhibits 123 to 139, which include said ore extraction record for the year 1915.

Affiant further says that in obedience to said precipe he made most diligent search for the said exhibits, but that he was unable to find the same and so reported to counsel for appellant, Silver King Coalition Mines Company.

Affiant further says that after the decision of the Honorable Circuit Court of Appeals in this case, and on, to-wit, about the 28th day of December, 1918, this affiant accidentally discovered Exhibits 123 to 140 (except 139), and called up Thomas Marioneaux, and notified him of such discovery, and said Thomas Marioneaux warned

648 affiant not to lose said exhibits again, but to keep them safely as he might some time wish to see them.

Affiant further says that several days later he met upon the street, Mr. Frank J. Westcott, the Secretary of the Silver King Coalition Mines Company, and supposing that the said cause was wholly ended and that the Silver King Coalition Mines Company was entitled to the exhibits as part of their office records, he requested Mr. Westcott to come to the Clerk's office and get the said exhibits, and Mr. Westcott came accordingly, and affiant gave the said exhibits into the possession of Mr. Westcott, who took them away, and returned them to

affiant on, to-wit, the 20th day of January, 1919, and they are now in affiant's possession.

Further affiant sayeth not.

JOHN W. CHRISTY.

Subscribed and sworn to before me this 21st day of January, 1919.

[SEAL.]

E. M. GARNETT,
Notary Public.

My commission expires January 31, 1920.

649 In the United States Circuit Court of Appeals, Eighth Circuit.

No. 5188.

SILVER KING COALITION MINES COMPANY, Appellant,

VS.

CONKLING MINING COMPANY, Appellee.

Affidavit of Thomas Marioneaux.

STATE OF UTAH,

County of Salt Lake, ss:

Thomas Marioneaux, being first duly sworn on his oath, says:

That he is one of the solicitors for the appellant in the above entitled cause.

Affiant further says that it may be necessary after a reading of the appellant's petition for a rehearing in this cause, or this Honorable Court may desire, to examine the ore extraction record of the King Company for the year 1915, in order to ascertain whether or no all the ore extracted on the Alliance side in that year came from the 600 stopes, and said ore extraction record shows on the face of it that all the ore extracted in the year 1915, did not come from the 600 stopes, but that approximately 25 cars of first class and 1906 cars of second class came from the 700 level stopes, entirely outside the three stopes considered by Mr. Taylor, and assumed by him to have produced all the ore mined the year 1915.

Further affiant sayeth not.

THOMAS MARIONEUX.

Subscribed and sworn to before me this 24th day of January, 1919.

[SEAL.]

CLARENCE M. BECK,
Notary Public.

650 Receipt of a copy of the foregoing motion admitted this 5th day of February, 1919, also affidavits of J. W. Christy, F. J. Westcott and two affidavits of T. Marioneaux, all attached to the motion.

E. B. CRITCHLOW,
W. W. RAY,

Solicitor for Appellee.

(Endorsed): Filed in U. S. Circuit Court of Appeals Feb. 11, 1919.

- 651 (*Order Denying Petition for a Rehearing and Motion for an Order Requiring District Court to Send Up Additional Parts of Record.*)

May Term, 1919.

Thursday, May 29, 1919.

This cause came on this day to be heard upon the petition of appellant for a rehearing and motion for an order requiring the said District Court to send up additional parts of record.

On consideration whereof, it is now here ordered by this Court, that said petition for a rehearing of this cause and the said motion be, and the same are hereby, denied.

May 29, 1919.

(*Motion for Stay of Mandate.*)

No. 3977.

CONKLING MINING COMPANY, Appellant,

VS.

SILVER KING COALITION MINES COMPANY, a Corporation, Appellee.

No. 5188.

SILVER KING COALITION MINES COMPANY, a Corporation, Appellant,

VS.

CONKLING MINING COMPANY, a Corporation, Appellee.

No. 5190.

CONKLING MINING COMPANY, a Corporation, Appellant,

VS.

SILVER KING COALITION MINES COMPANY, a Corporation, Appellee.

Comes now the above named Silver King Coalition Mines Company, the appellee and appellant above named, and upon the annexed affidavit of Frank J. Westcott, verified the 3rd day of June, 1919, moves and prays the court to make and enter of record an order staying the issuance and transmission of the writ of mandate in the above entitled causes Nos. 5188 and 5190, pending and until the hearing and determination of the petition for hearing and determination of the petition for writ of certiorari and motion therefor to be filed by the said Silver King Coalition Mines Company in the above entitled causes, in the Supreme Court of the United States.

652 This motion will be presented to the above entitled court at the court house thereof in the City of St. Paul, State of Minnesota, on Friday, the 6th day of June, 1919, at the opening of said court on said day, or as soon thereafter as counsel can be heard.

W. H. DICKSON,
A. C. ELLIS,
R. G. LUCAS,
T. MARIGNEAUX,
*Solicitors for Silver King
Coalition Mines Company.*

Received copy of the foregoing motion and affidavit this 3rd day of June, 1919.

E. B. CRITCHLOW,
Per G. A. CRITCHLOW,
Solicitors for Conkling Mining Company.

STATE OF UTAH,
County of Salt Lake, ss:

Frank J. Westcott, of lawful age, being first duly sworn, on his oath deposes and says:

1. That during all the times hereinafter mentioned and referred to, he has been and still is the Secretary of the Silver King Coalition Mines Company, Appellee and Appellant as above set forth.

2. That on the 29th day of May, 1919, as deponent is informed, the above entitled court made and entered an order denying the petition of the appellant, the Silver King Coalition Mines Company, for a rehearing, and the motion for an order requiring the United States District Court for the District of Utah to send up certain additional parts of the record in the case of Silver King Coalition Mines Company vs. Conkling Mining Company, No. 5188, in the above entitled court. And deponent is informed that unless otherwise ordered the mandate in said cause would issue during the week of June 2nd, 1919.

653 3. That it is the intention of the said Silver King Coalition Mines Company, in good faith, to duly file and present to the Supreme Court of the United States its petition for a writ of certiorari addressed to the United States Circuit Court of Appeals for the Eighth Circuit, commanding said court and the clerk thereof to certify to the said Supreme Court the records and proceedings in the case in said Court of Appeals, wherein the Conkling Mining Company, a corporation of Utah, is Appellant, and the Silver King Coalition Mines Company, a corporation, is Appellee, (C. C. A. No. 3977), above entitled; and the record and the proceedings in the case in said Court of Appeals wherein said Silver King Coalition Mines Company is Appellant and the said Conkling Mining Company is Appellee, (C. C. A. No. 5188), above entitled; and the record and proceedings in the case in said Court of Appeals wherein the said Conkling Mining Company is Appellant and said Silver

King Coalition Mines Company is Appellee, (C. C. A. No. 5190), above entitled; together with the opinions of the said Court of Appeals therein, for the review and determination of said causes by the said Supreme Court. And to that end the said Silver King Coalition Mines Company has already prepared and had printed and verified its petition for writ of certiorari and its motion for writ of certiorari, addressed to the said Supreme Court of the United States, a true copy whereof is herewith submitted, and a true copy whereof has this day been served on the Solicitors for said Conkling Mining Company, together with a notice, a true copy whereof is hereto annexed and marked Exhibit "A". Under the statute and rules of the Supreme Court of the United States the time of said Silver King Coalition Mines Company to file and present its said petition for writ of certiorari does not expire until the 29th day of August, 1919, but as it is the intention of said Silver King Coalition Mines Company to expedite the presentation and submission of said petition for writ of certiorari as much as possible, the said Silver King Coalition Mines Company has, as shown by said Exhibit "A" hereto attached, noticed the same for Saturday, the 26th day of July, 1919.

4. That the judgment recovered by the said Appellee in said cause No. 5188 on March 27th, 1918, was for the sum of \$542,222.58; and that on the appeal to this Honorable Court the Appellant in said cause gave a good and sufficient supersedeas bond in the sum of \$700,000.00, which said bond is still in full force and effect; and that if this court should stay the issuance and transmission of its mandate in said cause the ends of justice would be subserved and said Appellee protected by the continuance of said bond; but if in the opinion of this Honorable Court the ends of justice demand the giving of another and an additional bond pending such stay in a reasonable time to be fixed by the court in a reasonable amount, said Appellant is ready, willing and able to give the same.

5. Wherefore on behalf of said Silver King Coalition Mines Company, deponent respectfully prays the court to make and enter of record an order staying the issuance and transmission of the writ of mandate in the above entitled causes Nos. 5188 and 5190, pending and until the hearing of the said petition for writ of certiorari and motion therefor to be filed and presented by said Silver King Coalition Mines Company in the above entitled causes in the Supreme Court of the United States.

FRANK J. WESTCOTT.

Subscribed and sworn to before me this 3rd day of June, 1919.

[SEAL.]

M. L. GUARD,

Notary Public in and for Salt Lake County,

State of Utah.

My commission expires Jan. 29/22.

Notice.

To the Conkling Mining Company, a corporation, appellant and appellee as above named, and to its solicitors, Messrs. Edward B. Critchlow, William W. Ray, William D. McHugh, William J. Barrette, and William H. King:

Please take notice that the Silver King Coalition Mines Company, appellee and appellant, as above set forth, will, on Saturday, the 26th day of July, 1919, upon its verified petition for writ of certiorari in the above-entitled causes, its motion for such writ in the above-entitled causes, and a duly authenticated copy of the entire records in these causes (including all proceedings had in said causes in the above-entitled Circuit Court of Appeals), present said petition for said motion to the Supreme Court of the United States, in its court room at the Capitol, in the City of Washington, D. C., by filing the same, together with the printed records and briefs thereon, in the office of the clerk of said Supreme Court of the United States, in accordance with Rule 37 of said Supreme Court of the United States and the statutes in such cases made and provided.

Copies of said petition for writ of certiorari and motion therefor are herewith served upon you.

And please take further notice that said Silver King Coalition Mines Company will apply to the above-entitled United States Circuit Court of Appeals for the Eighth Circuit for an order staying the issuance and transmission of a writ of mandate in the above-entitled causes Nos. 5188 and 5190, copy of which motion and the affidavits in support of which are herewith served upon you.

CURTIS H. LINDLEY,
W. H. DICKSON,
THOMAS MARIONEAUX,
A. C. ELLIS, Jr.,
R. G. LUCAS,

*Solicitors for Silver King
Coalition Mines Company.*

The foregoing notice is hereby accepted and delivery of a copy thereof and of the petition for writ of certiorari and motion for writ of certiorari and motion for stay of mandate is hereby acknowledged this — day of June, 1919.

Solicitors for Conkling Mining Company.

(Endorsed:) Filed in U. S. Circuit Court of Appeals Jun. 6, 1919.

(Order Staying Mandate.)

May Term, 1919.

Friday, June 6, 1919.

On reading the motion of the Silver King Coalition Mines Company, the appellee and appellant above named, for stay of mandate this day filed in this court and called for hearing, and after hearing R. G. Lucas of counsel in support of said motion, and E. B. Critchlow Esq., appearing for said Conkling Mining Company, and he not objecting thereto;

Now, therefore, it is hereby ordered that said motion be and the same is hereby granted and allowed and that the issuance and transmission of the writ of mandate in the above entitled causes

656 Nos. 5188 and 5190 be, and the same is hereby stayed pending and until the hearing and determination of the petition for writ of certiorari and motion therefor to be filed by the said Silver King Coalition Mines Company in the above entitled causes in the Supreme Court of the United States;

And it is further ordered that as a condition of the foregoing stay the said Silver King Coalition Mines Company do and shall within sixty days from the date hereof duly make, execute and file in this court, an additional stay or supersedeas bond in the sum of \$200,000.00 with sureties to be approved by the Judges of the District Court of the United States, for the District of Utah.

June 6th, 1919.

(Additional Supersedeas Bond of Silver King Coalition Mines Company.)

Know all men by these presents:

That we, the Silver King Coalition Mines Company, a corporation, as principal, and C. W. Whitley of Salt Lake City, Utah and Timothy Kinney of Rock Springs, Wyoming, as sureties, are held and firmly bound unto the Conkling Mining Company, a corporation, in the penal sum of two hundred thousand dollars (\$200,000), for which sum well and truly to be paid we bind ourselves, our executors, successors, administrators and assigns, jointly and severally, firmly by these presents.

Witness our hands and seals this 28th day of July, 1919.

Whereas, on the 29th day of May, 1919, in the United States Circuit Court of Appeals for the Eighth Circuit, in suits pending in that court between said Conkling Mining Company, plaintiff, and said Silver King Coalition Mines Company, defendant, decrees were rendered in favor of said Conkling Mining Company and

657 against said Silver King Coalition Mines Company, and the latter company desiring to obtain the allowance of a writ of certiorari by the Supreme Court of the United States to reverse the decrees in said suits; and

Whereas, on the 6th day of June, 1919, the Circuit Court of Appeals for the Eighth Circuit in the above-entitled causes did by an

order duly given, made and entered in said causes and each of them, stay the issuance and transmission of a mandate in the above-entitled causes, Nos. 5188 and 5190, pending and until the hearing and determination of the petition for writ of certiorari and motion therefor, to be filed by the said Silver King Coalition Mines Company in the above-entitled causes in the Supreme Court of the United States, pursuant to the statute in such case made and provided and the rules of said last-named court, upon condition that within the period of sixty days from the said 6th day of June, 1919, the said Silver King Coalition Mines Company shall make, execute and file in said Circuit Court of Appeals an additional stay or supersedeas bond in the sum of two hundred thousand dollars (\$200,000) with sureties to be approved by the Judge of the District Court of the United States for the District of Utah;

Now, the condition of the above obligation is such that if the above-named Silver King Coalition Mines Company shall prosecute its said application for a writ of certiorari to effect, or if, within the time allowed by law it shall fail to perfect its application for said writ of certiorari, or if its application for same shall be denied, or if the application being granted and the writ issued, it shall fail to make good its plea in the Supreme Court of the United States and the judgment of the Circuit Court of Appeals shall be affirmed in whole or in part, and the said Silver King Coalition Mines Company shall, upon the happening of either or any of said contingencies, pay all damages and costs, then this obligation shall be void; otherwise to remain in full force and effect.

[SEAL.]

SILVER KING COALITION MINES
COMPANY,*Principal.*

By MOYLAN C. FOX,

President.

658

Attest:

F. J. WESTCOTT,

Secretary.

C. W. WHITLEY,

TIMOTHY KINNEY,

Sureties.

The foregoing undertaking is hereby approved this 1st day of August, 1919.

TILLMAN D. JOHNSON,
*Judge of the District Court of the
United States for the District of Utah.*

O. K. as to sufficiency of sureties only, expressly declining to approve as to form of undertaking.

C. B. CRITCHLOW,
WILLIAM W. RAY,
Solicitors for Respondent.

(Endorsed:) Filed in U. S. Circuit Court of Appeals Aug. 4, 1919.

(Præcipe for Transcript for Supreme Court on Return to Writ of Certiorari in Nos. 5188 and 5190.)

Please forward in addition to what has already been forwarded to Washington in obedience to the writ of certiorari issued in the above cases Numbered 5188 and 5190, all the exhibits in your possession and which are made a part of the record on appeal, namely, the following exhibits:

Originals (Case No. 3977).

- Exhibit 5. Plaintiff's surface Map.
- Exhibit MM. Assay Map.
- Exhibit 17. Cross-Section Aetna.
- Exhibit 18. Plaintiff's exhibit McKay Cross-Cut.
- Exhibit 19. Cross section through DD.
- Exhibit 9. Cross section along Apex.
- Exhibit 12. Surface Map, Sampson Workings.
- Exhibit T. Patent Custer No. 2 and Silver Hill No. 4 Claim.
- Exhibit F. Patent Brave Columbia.
- Exhibit G. Patent Constitution.
- Exhibit H. Patent Cumberland.

659

- Exhibit M. Field notes, Pirate King.
- Exhibit J. Field notes, Zephyre.
- Exhibit N. Field notes, Hope.
- Exhibit I. Patent Monroe Doctrine.
- Exhibit Y. Field Notes, Custer & Silver Hill.
- Exhibit O. Field notes, Conkling.
- Exhibit W. Field notes, 20th Century.
- Exhibit Z. Field notes, Arctic.
- Exhibit K. Field Notes, Brave Columbia.
- Exhibit L. Field Notes, Nero.
- Exhibit X. Field Notes, San Pedro Claim.
- Exhibit 1. Patent Conkling.
- Exhibit TT-3-4. Letter Instruction from McFarland.
- Exhibit 4. Survey order for Conkling Claim.
- Exhibit TT-2. Daggett's Instruction Book.
- Exhibit TT-1. Solomon's Instruction Book.
- Exhibit 20½. Map of Conkling Etc.
- Exhibit PP. Sketch showing Dip of Beds.
- Exhibit QQ. Three sketches, 2, 3 and 4, showing dip of beds.
- Exhibit 23. KK Level Section.
- Exhibit 11. Porphyry Dyke and Step Faulting.
- Exhibit LL. Assay Map.
- Exhibit P. Section from bearing tree.
- Exhibit 3. Two Old Posts.
- Exhibit FF. Cross-section through Baskins' Stope.
- Exhibit DD. Section of Crescent Hill and Crescent Vein.
- Exhibit CC. Projection on Vertical Plane along course vertical of Crescent vein.

Exhibit A. Projection of workings to horizontal plane.
Exhibit B. Surface Map.
Exhibit E. Patent Boss Claim.
Exhibit D. Patent Zephyre Claim.
Exhibit C. Patent Pinyon and Pinyon Extension.
Exhibit HH. MacVichie's Report Map.
Exhibit 10. Section along Columbia Raise.
Exhibit UU. Sketch.

Substituted Copies of Originals (Case No. 3977.)

Exhibit Q. Photo of Tree.
Exhibit R. Photo of Tree.
Exhibit S. Photo of Tree.

660 Also the following exhibits in case No. 5188:

Exhibits 1 to 20, both inclusive, being maps.
Exhibits 24, 45 and 85, being maps.
Exhibit 41, Shift Boss Book.
Exhibit 42, Book for March 1, 1914.
Exhibit 43, Book for April 1914.
Exhibit 44, Book for May 1914.
Exhibit 53, Ore Book.
Exhibits 59, 60, 61, 62, 63, and 109, being samples of rock.
Exhibit 68, Extract from ore-sales book, June 7, 1908 to 1916.
Exhibit 69, Tabulation of ore shipments in 1907, Jan. to May.
Exhibit 70, KK Ore Book.
Exhibit 71, Settlement sheet for Lot 1, Crude KK Mining Co.,
May 8, 1907.
Exhibit 72, Same for Lot 2.
Exhibit 73, Same for Lot 3.
Exhibit 74, Same for Lot 4.
Exhibit 75, Same for Lot 1 Concentrates.
Exhibit 76, Same for Lot 2 Concentrates.
Exhibit 86, Tabulation showing tonnage etc for Oct, Nov. and
December, 1906.
Exhibit 87, Similar tabulations.
Exhibit 90, Tabulation showing tonnage.
Exhibit 94, Shift Boss Book.
Exhibit 118, Sheets from ore book,
Exhibit 119, Same.
Exhibit 120, Same.
Exhibit 121, Same.
Exhibit 122, Same.

W. H. DICKSON,
A. C. ELLIS, JR.,
R. G. LUCAS,
L. F. ADAMSON,
THOMAS MARIONEUX.

*Solicitors for Silver King
Coalition Mines Company.*

Dated May 3, 1920.

(Endorsed:) Filed in U. S. Circuit Court of Appeals May 3, 1920.

- 661 (*Order for Substitution of Exhibits and Transmission of Exhibits to Supreme Court U. S. on Writ of Certiorari.*)

May Term, 1920.

Monday, May 3, 1920.

The motion of the Silver King Coalition Mines Company to withdraw certain original exhibits in the case of Conkling Mining Company vs. Silver King Coalition Mines Company No. 3977, from the files in the consolidated cases of Silver King Coalition Mines Company vs. Keystone Mining Company, No. 5325 and Silver King Coalition Mines Company vs. W. J. Shealy, Admr. et al. No. 5326 where said original documents were used as exhibits subsequent to their having been introduced and used as exhibits in said case No. 3977; and to substitute copies for certain original exhibits in said case No. 3977 which have been lost or mislaid; and to transmit said original exhibits, and said substituted copies of original exhibits, together with other original exhibits to the Clerk of the Supreme Court of the United States at Washington, D. C., in obedience to the writ of certiorari issued by the Supreme Court of the United States to this Court in cases No. 5188 and No. 5190, coming on regularly to be heard before this court on this 3rd day of May, 1920, L. F. Adamson, of the Firm of Dickson, Ellis, Lucas and Adamson, appearing as solicitor for Silver King Coalition Mines Company, solicitor for Conkling Mining Company, not being present, and it appearing to the court that the following original exhibits in case No. 3977 were subsequently used in the aforesaid consolidated cases No. 5325 and No. 5326, and were sent up to this court under præcipe on appeal, and are now in the possession of this Court, namely:

- Exhibit B, being a surface map.
- Exhibit A, being a projection to horizontal plane.
- Exhibit D, being patent to the Zephyr claim.
- Exhibit CC, being a projection on vertical plane along course of Crescent Vein.
- 662 Exhibit DD, being a section of Crescent Hill and Crescent Vein.
- Exhibit FF, being a cross-section through Baskin's Stope.
- Exhibit HH, being MacVichie's Report Map.
- Exhibit C, being patent to pinyon and pinyon extension.
- Exhibit E, being patent to the Boss Claim.
- Exhibit 10, being a section along Columbia Raise.
- Exhibit UU, being a sketch.

And it further appearing to the court that the following original exhibits in said case No. 3977 have been lost or mislaid, namely:

- Exhibit Q, said to be a copy of photograph.
- Exhibit R, said to be a copy of photograph.
- Exhibit S, said to be a copy of photograph.

It further appearing to the court that true and correct copies of said exhibits Q, R and S have been made and have been produced to the court and lodged with the Clerk, each being authenticated by

the signature of the Clerk thereon, and the title of the exhibit; now, therefore,

It is hereby ordered that said original exhibits hereinbefore referred to and designated as B. A. D. CC. DD. FF. HH. C. E. 10, and UU, which were withdrawn from the files in case No. 3977 and used as exhibits in the consolidated case of Silver King Coalition Mines Company vs. Keystone Mining Company No. 5325, and Silver King Coalition Mines Company vs. W. J. Shealy, Admr. et al. No. 5326, and which were sent up to this court under præcipe on appeal, and are now in the possession of this court, be and they are hereby withdrawn from the files of said consolidated case; and

It is hereby further ordered that said copies of said original exhibits hereinbefore referred to and designated as Q. R. and S., and lodged with the clerk of this Court, are hereby substituted for the originals of said exhibits; and

663 It is hereby further ordered that the clerk of this court shall transmit said original exhibits, and said substituted copies of original exhibits, as hereinbefore set forth and detailed, together with the following additional original exhibits in said cause No. 3977 to the Clerk of the Supreme Court of the United States at Washington, D. C., in obedience of the writ of certiorari issued by the Supreme Court of the United States to this Court in cases No. 5188, and 5190, namely

Exhibit 5, Plaintiff's surface map.

Exhibit MM, Assay map.

Exhibit 17, Cross-section Aetna.

Exhibit 18, Plaintiff's exhibit McKay Cross-cut.

Exhibit 19, Cross section through DD.

Exhibit 9, Cross section along apex.

Exhibit 12, Surface map Sampson Workings.

Exhibit T, Patent Custer No. 2 and Silver Hill No. 4 Claims.

Exhibit F, Patent Brave Columbia.

Exhibit G, Patent Constitution.

Exhibit H, Patent Cumberland.

Exhibit M, Field Notes Pirate King.

Exhibit J, Field Notes Zephyr.

Exhibit N, Field Notes Hope.

Exhibit I, Patent Monroe Doctrine.

Exhibit Y, Field Notes Custer and Silver Hill.

Exhibit O, Field Notes Conkling.

Exhibit W, Field Notes 20th Century.

Exhibit Z, Field Notes Arctic.

Exhibit K, Field Notes Brave Columbia.

Exhibit L, Field Notes Nero.

Exhibit X, Field notes San Pedro.

Exhibit 1, Patent Conkling.

Exhibit TT-3-4, Letter Instruction from McFarland.

Exhibit 4, Survey order for Conkling claim.

Exhibit TT-2, Daggett's Instruction Book.

Exhibit TT-1, Solomon's Instruction Book.

Exhibit 20½, Map of Conkling. Etc.
 Exhibit PP, Sketch showing dip of beds.
 Exhibits QQ, Three sketches, 2, 3, and 4, showing dip of beds.
 Exhibit 23, KK Level section.
 Exhibit II, Porphyry Dyke and Step Faulting.
 Exhibit LL, Assay Map.
 Exhibit P, Section of a bearing tree.
 Exhibit 3, Two Old Posts.

664 Also the following exhibits in case No. 5188:

Exhibits 1 to 20, both inclusive, being maps.
 Exhibits 24, 45, and 85, being maps.
 Exhibit 41, Shift Boss Book.
 Exhibit 42, Book for March 1, 1914.
 Exhibit 43, Book for April, 1914.
 Exhibit 44, Book for May, 1914.
 Exhibit 53, Ore Book.
 Exhibits 59, 60, 61, 62, 63, and 109, being samples of rock.
 Exhibit 68, Extract from ore sales book, June 7, 1908 to 1916.
 Exhibit 69, Tabulation of ore shipments in 1907, Jan. to May.
 Exhibit 70, KK Ore Book.
 Exhibit 71, Settlement sheet for Lot 1, Crude KK Mining Co., May 8, 1907.
 Exhibit 72, Same for Lot 2.
 Exhibit 73, Same for Lot. 3.
 Exhibit 74, Same for Lot 4.
 Exhibit 75, Same for Lot 1 Concentrates.
 Exhibit 76, Same for Lot 2 Concentrates.
 Exhibit 86, Tabulation showing tonnage, etc., for Oct., Nov. & Dec., 1906.
 Exhibit 87, Similar tabulations.
 Exhibit 90, Tabulation showing tonnage.
 Exhibit 94, Shift Boss Book.
 Exhibit 118, Sheets from ore book.
 Exhibit 119, Same.
 Exhibit 120, Same.
 Exhibit 121, Same.
 Exhibit 122, Same.

Dated May 3rd, 1920.

665 UNITED STATES OF AMERICA, ss:

[Seal of the Supreme Court of the United States.]

The President of the United States to the Honorable the Judges of the United States Circuit Court of Appeals for the Eighth Circuit, Greeting:

Being informed that there is now pending before you a suit in which Silver King Coalition Mines Company is appellant, and Conkling Mining Company is appellee, No. 5188, and Conkling Mining

Company is appellant, and Silver King Coalition Mines Company is appellee, No. 5190, which suit was removed into the said Circuit Court of Appeals by virtue of an appeal and cross-appeal from the District Court of the United States for the District of Utah, and we, being willing for certain reasons that the said cause and the record and proceedings therein should be certified by the said Circuit Court of Appeals and removed into the Supreme Court of the United States.

666 Do hereby command you that you send without delay to the said Supreme Court, as aforesaid, the record and proceedings in said cause, so that the said Supreme Court may act thereon as of right and according to law ought to be done.

Witness the Honorable Edward D. White, Chief Justice of the United States, the twenty-fourth day of October, in the year of our Lord one thousand nine hundred and nineteen.

JAMES D. MAHER,

Clerk of the Supreme Court of the United States.

[Endorsed:] File No. 27,244. Supreme Court of the United States, October Term, 1919. No. 489. Silver King Coalition Mines Company vs. Conkling Mining Company. Writ of Certiorari. Filed Apr. 20, 1920. E. E. Koch, Clerk.

Return to Writ of Certiorari.

UNITED STATES OF AMERICA,
Eighth Circuit, ss:

In obedience to the command of the within Writ of Certiorari, I herewith transmit to the Supreme Court of the United States, a duly certified transcript of the record and proceedings in the within entitled causes, with all things concerning the same.

In testimony whereof, I hereunto subscribe my name and affix the seal of the United States Circuit Court of Appeals for the Eighth Circuit, at office in the City of St. Louis, Missouri, this tenth of June, A. D. 1920.

[Seal of United States Circuit Court of Appeals, Eighth Circuit.]

E. E. KOCH,
*Clerk of the United States
Circuit Court of Appeals,
Eighth Circuit.*

667 *(Clerk's Certificate.)*

United States Circuit Court of Appeals, Eighth Circuit.

I, E. E. Koch, Clerk of the United States Circuit Court of Appeals for the Eighth Circuit, do hereby certify that the foregoing contains the transcripts of the record from the District Court of the

United States for the District of Utah as prepared and printed under the rules of the United States Circuit Court of Appeals for the Eighth Circuit, under the supervision of its Clerk, and full, true and complete copies of the pleadings, record entries and proceedings, including the opinion, had and filed in the United States Circuit Court of Appeals except the full captions, titles and endorsements omitted in pursuance of the rules of the Supreme Court of the United States, in certain causes in said Circuit Court of Appeals wherein the Silver King Coalition Mines Company was Appellant, and the Conkling Mining Company was Appellee, No. 5188, and also wherein the Conkling Mining Company, a corporation, was Appellant, and the Silver King Coalition Mines Company was Appellee, No. 5190, as full, true and complete as the originals of the same remain on file and of record in my office.

I do further certify that the original writ of certiorari with the Clerk's return endorsed thereon is hereto attached and herewith returned.

I do further certify that in pursuance of the order of this Court entered May 3, 1920, appearing at page 661 of this transcript, the exhibits enumerated in said order are being transmitted to the Clerk of the Supreme Court of the United States.

In testimony whereof, I hereunto subscribe my name and affix the seal of the United States Circuit Court of Appeals for the Eighth Circuit, at office in the City of St. Louis, Missouri, this tenth day of June, A. D. 1920.

[Seal of United States Circuit Court of Appeals, Eighth Circuit.]

E. E. KOCH,
*Clerk of the United States
Circuit Court of Appeals,
for the Eighth Circuit.*

[Endorsed:] File No. 27244. Supreme Court U. S. October Term, 1920. Term No. 158. Silver King Coalition Mines Company, Petitioner, vs. Conkling Mining Company. Writ of Certiorari and return. Filed June 14, 1920.

DEAR SCOTT

UNITED STATES OF AMERICA

DEPARTMENT OF THE INTERIOR

LAND OFFICE

No. 100

SILVER KING COALITION MINING COMPANY, PETITIONER,

vs.

COCKLAND MINING COMPANY.

IN WITNESS WHEREOF, I, THE UNITED STATES DEPARTMENT OF THE INTERIOR, HAVE CAUSED THIS DEED TO BE SIGNED AND SEALED FOR THE PUBLIC RECORD.

WITNESSED AND SIGNED THIS 10th DAY OF

APRIL, 1900, AT WASHINGTON, D. C.

JOHN ROBERTS, SECRETARY OF THE INTERIOR.

(BY 244)

(27,244)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1920.

No. 158.

SILVER KING COALITION MINES COMPANY, PETITIONER,

vs.

CONKLING MINING COMPANY.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT
OF APPEALS FOR THE EIGHTH CIRCUIT.

INDEX.

	Original.	Prior.
Caption	ii	1
Designation of appellant as to printing record.....	1	2
Caption to transcript from U. S. district court.....	2	3
Amended bill of complaint.....	2	3
Answer to amended bill of complaint.....	19	19
Stipulation in re certain pleadings.....	42	38
Amended answer to amended bill of complaint.....	42	38
Replication to answer.....	45	38
Stipulation as to taking of testimony.....	46	54
Order as to taking of testimony.....	46	59
Stipulation as to trial.....	47	59
Statement of evidence.....	47	60
Caption	47	60
Testimony for defendant.....	47	60
Testimony of Charles H. Glitch.....	47	60
Plaintiff's offer of U. S. patent to Conkling lode mining claim, etc.....	75	67

	Original.	Foot.
Stipulation that parties are tenants in common of the Cookling and Arthur lode mining claims, etc.....	70	67
Testimony for defendant.....	70	68
Offer of certain mineral patents.....	70	68
Stipulation that the defendant is the owner of certain lode mining claims.....	77	69
Testimony of Charles P. Brooks.....	78	69
Stipulation that there is no dispute as to easterly boundaries of Cookling claim.....	84	74
Testimony of J. Ferson Smith.....	86	76
Charles P. Brooks (recalled).....	89	79
Walter H. Wiley.....	90	79
Robert Gorlinski.....	92	81
R. H. Brown.....	94	82
Charles P. Brooks (recalled).....	95	84
James B. Kearns.....	101	89
Arthur G. Dalley.....	104	91
Charles S. Cowan.....	104	91
M. J. Dalley.....	104	92
Richard H. Brown.....	110	96
Hans Johnson.....	110	96
George D. Blood.....	112	98
Arthur G. Dalley (recalled).....	126	110
Charles P. Brooks (recalled).....	126	110
Hans Johnson (recalled).....	126	110
David Keith.....	126	110
Thomas Kearns.....	128	110
Walter H. Wiley (recalled).....	127	111
George D. Blood (recalled).....	151	139
Charles P. Brooks (recalled).....	152	131
Letter, N. C. McFarland, commissioner, to Frederick Solomon, U. S. surveyor general, April 27, 1892.....	154	133
Testimony of A. G. Andrews.....	155	134
Testimony for complainant in rebuttal.....	155	134
Testimony of William A. Wilson.....	155	134
Testimony of Frank Anderson.....	156	135
Exhibit 4—Letter, Ellsworth Daggott, U. S. sur- veyor general, to A. Jensen, U. S. mineral sur- veyor, November 11, 1899.....	157	136
Testimony of A. G. Andrews.....	159	137
Samuel Percival Parker.....	159	138
M. S. Hanauer.....	160	139
Max Boehmer.....	161	139
Nicholas Treweek.....	173	149
William A. Wilson (recalled).....	196	160
Nicholas Treweek (recalled).....	207	206
O. A. Palmer.....	238	206
William A. Wilson (recalled).....	249	214
Testimony for defendant in surrebuttal.....	249	215
Testimony of George D. Blood.....	249	215
Testimony of William A. Wilson.....	256	221
Approval of statement of evidence, etc., by district judge..	256	221

INDEX.

111

	Original.	Print.
Opinion of the district court.....	257	221
Decree, August 5, 1912.....	265	236
Petition for appeal.....	265	227
Assignment of errors.....	264	227
Order allowing appeal, etc.....	265	236
Bond on appeal.....	267	239
Order enlarging time to file transcript in appellate court to April 15, 1913.....	268	251
Order enlarging time to file transcript in appellate court to May 15, 1913.....	268	252
Stipulation for transmission of original exhibits to appellate court.....	269	252
Précise for transcript.....	270	254
Clerk's certificate to transcript.....	271	255
Citation and acceptance of service.....	272	255
Supplemental transcript.....	273	256
Order of district court as to supplemental transcript.....	273	256
Clerk's certificate.....	273	257
Stipulation as to supplemental transcript, etc.....	274	257
Testimony on cross-examination of Max Boehmer, a witness for plaintiff.....	275	258
Plaintiff's Exhibit 1—United States patent to the Conkling lode mining claim, issued to Bon Mining Co.....	280	245
Proceedings in U. S. circuit court of appeals.....	287	247
Appearance of Messrs. Edward B. Critchlow, William J. Barrette, and William H. King as counsel for appellant.....	287	247
Appearance of counsel for appellee.....	287	248
Appearance of Mr. William D. McHugh as counsel for appellant.....	287	248
Order of submission.....	288	248
Opinion U. S. circuit court of appeals.....	288	248
Decree U. S. circuit court of appeals.....	288	257
Petition of appellee for a rehearing.....	301	254
Order denying petition for rehearing.....	323	275
Clerk's certificate to transcript.....	323	275
Clerk's additional certificate.....	325	276

TRANSCRIPT OF RECORD.

United States Circuit Court of Appeals, Eighth Circuit.

No. 3977.

CONKLING MINING COMPANY, Appellant,

vs.

SILVER KING COALITION MINES COMPANY, Appellee.

Appeal from the District Court of the United States for the District
of Utah.

Filed May 12, 1913.

Pleas and proceedings in the United States Circuit Court of Appeals for the Eighth Circuit, at the December Term, 1915, of said Court, before the Honorable Walter H. Sanborn and the Honorable Walter I. Smith, Circuit Judges, and the Honorable William H. Pope, District Judge.

Attest:

[SEAL.]

E. E. KOCH.

*Clerk of the United States Circuit
Court of Appeals for the Eighth
Circuit.*

Be it remembered that heretofore, to-wit: on the twelfth day of May, A. D. 1913, a transcript of record, pursuant to an appeal allowed by the District Court of the United States for the District of Utah, was filed in the office of the Clerk of the United States Circuit Court of Appeals for the Eighth Circuit, in a certain cause wherein the Conkling Mining Company, is Appellant, and the Silver King Coalition Mines Company is Appellee, which said transcript as prepared and printed under the rules of the United States Circuit Court of Appeals under the supervision of its Clerk and in pursuance of the Designation of Appellant for the use of the Court upon the hearing of said cause, is in the words and figures following, to-wit:

1 (*Designation of Appellant as to Printing Record.*)

In the United States Circuit Court of Appeals, Eighth Circuit.

No. 3977.

CONKLING MINING CO.

vs.

SILVER KING COALITION MINES CO.

To the clerk of said court:

You will please print the Transcript on Appeal in the above entitled cause and include therein the following:

	Pages.
Amended Bill.....	1— 26
Answer to Amended Bill.....	27— 56
Stipulation in re pleadings.....	57
Amended Answer to Amended Bill.....	58— 86
Replication to Answer.....	87
Stipulation in re taking Testimony.....	88
Order in re same.....	89
Stipulation in re trial.....	90
Statement of Evidence.....	91—362
Opinion.....	363—372
Decree.....	373
Petition for Appeal.....	374
Assignment of Errors.....	375—378
Order Fixing Bond on Appeal.....	379
Bond on Appeal.....	380—381
Orders in re Appeal—extending time transcript.....	382
Stipulation in re Exhibits.....	383—384
Præcipe for Transcript.....	385—386
Certificate.....	387
Citation.....	388

Also in full the Patent for the Conkling Lode Mining Claim.

E. B. CRITCHLOW,

W. J. BARRETTE,

WM. H. KING,

Solicitors for Appellant.

Copy served on us this 8th day of May 1913.

DICKSON, ELLIS, ELLIS & SCHULDER, &
POWERS & MARIONEUX,

Solicitors for Appellee.

Filed May 12, 1913.

JOHN D. JORDAN,

UNITED STATES OF AMERICA.

District of Utah, ss:

At a Stated term of the United States District Court for the District of Utah, begun and held at the building used as a United States court-house, in the city of Salt Lake, in said district, on the second Monday, being the twelfth day of April, in the year of our Lord one thousand nine hundred and nine, and of the Independence of the United States of America the one hundred and thirty-third.

Present: Honorable John A. Marshall, United States District Judge for the District of Utah.

No. 307. Equity.

CONKLING MINING COMPANY, a Corporation, Complainant,

vs.

SILVER KING COALITION MINES COMPANY, a Corporation,
Defendant.

Be it remembered that heretofore and on the 5th day of July, 1909, said complainant filed its Amended Complaint in the Circuit Court of the United States for the District of Utah, which, being entitled in said court and cause, is in words and figures following, to-wit:

(Amended Bill of Complaint.)

To the Honorable the Judges of the Circuit Court of the United States in and for the District of Utah:

The Conkling Mining Company, a corporation organized and existing under the laws of the State of Utah, and a citizen of the State of Utah, by leave of this Court first had and obtained, files this, its Amended Bill of Complaint, against the Silver King Coalition Mines Company, a corporation organized and existing under the laws of the State of Nevada, and a citizen of the State of Nevada; and thereupon your orator respectfully represents and alleges:

I.

That on or about the seventeenth day of September A. D. 1908, Nicholas Treweek and J. Leonard Burch, the original complainants herein, caused your orator to be duly incorporated under the laws of the State of Utah for the purpose and pursuit of mining.

That the capital stock of your orator was paid for upon the incorporation of said Company by a conveyance and transfer to your orator by said Nicholas Treweek and J. Leonard Burch of all their right, title and interest (being an undivided three-fourths) in and to the Conkling lode mining claim, patented as U. S. Lot No. 689,

and the Arthur lode mining claim, patented as U. S. Lot No. 690, situated in the Uintah Mining District, County of Summit and State of Utah, and also by an assignment and transfer to your orator of all manner of actions and causes of actions, suits, dues, demands, controversies and accounting of every kind and nature whatsoever in favor of said Nicholas Treweek and J. Leonard Burch against the defendant herein.

II.

That said defendant corporation was organized and incorporated under the laws of the State of Nevada, on or about the month of May 1907, to consolidate and take over sundry mining claims and properties, including the Kearns-Keith Mining Company, and the Silver King Mining Company, respectively corporations, which said last-named companies theretofore and for a long time had been engaged in the business of mining in the mining district where said Conkling and Arthur Lode Mining Claims are situated.

III.

That in and by said consolidation and merger the defendant corporation succeeded to the interest then and theretofore owned by said Kearns-Keith Mining Company in and to said Conkling and Arthur lode mining claims, viz., [and] undivided one-fourth ($\frac{1}{4}$) interest therein.

That on or about the twenty-second day of September 1903, said Kearns-Keith Mining Company, predecessor in interest and grantor of the defendant herein, became the owner of said undivided one-fourth ($\frac{1}{4}$) interest in and to said Conkling and Arthur lode mining claims, and ever since continued to be the owner thereof until the same was transferred to and merged in the defendant company as aforesaid, to-wit: on or about the twenty-ninth day of May 1907.

III.

That during all of the time that said Kearns-Keith Mining Company was the owner of said undivided one-fourth ($\frac{1}{4}$) interest in said Conkling and Arthur lode mining claims, the said Nicholas Treweek, as tenant-in-common with said Kearns-Keith Mining Company, was the owner of an undivided one-half ($\frac{1}{2}$) interest in and to said mining claims and each of them.

That upon the transfer by said Kearns-Keith Mining Company to the defendant as aforesaid, said Treweek continued to be a tenant-in-common with the defendant herein in said mining claims and each of them, and so continued to be until the transfer to your orator as hereinbefore alleged.

4

IV.

That said J. Leonard Burch since on or about the sixteenth day of May 1906, until the transfer to your orator herein, was the owner of an undivided one-fourth ($\frac{1}{4}$) interest in and to said Conkling and Arthur lode mining claims. That as such owner since said sixteenth day of May 1906, he was a tenant-in-common with said Kearns-Keith Mining Company in said mining claims and each of them until the time of the transfer by said Kearns-Keith Mining Company of its interests therein to the defendant herein, and since the time of said transfer he was a tenant-in-common with the defendant herein in said claims and each of them, until he transferred his interest to your orator as hereinbefore alleged.

V.

That on or about the twenty-third day of February 1892, the United States of America by its letters patent granted to the Boss Mining Company, a corporation, those certain premises called the Conkling and Arthur Lode Mining claims, respectively situated in the Uintah Mining District, County of Summit, then Territory, now State, of Utah, said Conkling Lode Mining claim being particularly bounded and described in said patent, to-wit:

"Bounded, described and platted as follows, with magnetic variation seventeen degrees and twenty minutes east,

Beginning at corner No. 1, a pine post four inches square marked U. S. 689 P. 1.

Thence first course north twenty-one degrees and nine minutes west three hundred feet to discovery point six hundred feet to corner No. 2, a pine post four inches square marked U. S. 689 P. 2, being also corner No. 4 of Lot No. 191, the Lincoln Lode Claim, and corner No. 2 of Lot No. 580, the Pirate King lode claim, from which U. S. mineral monument No. 4 bears north thirty two degrees and fifty-two minutes west nine hundred and thirty-nine and three-tenths feet distant, and a pine tree four inches in diameter marked U. S. 689 P. 2. B. T. bears north thirteen degrees west twenty-eight feet distant.

Thence second course, south sixty degrees and forty-five minutes west one thousand five hundred feet to corner No. 3.

Thence third course south twenty-one degrees and nine minutes east six hundred feet to corner No. 4.

Thence fourth course north sixty degrees and forty-five minutes east one thousand five hundred feet to corner No. 1, the place of beginning; said Lot No. 689 extending one thousand five hundred feet in length along said Conkling vein or lode, and containing twenty acres and forty-five hundredths of an acre of land more or less,"

and said Arthur lode mining claim being particularly bounded and described in said patent, to-wit:

"Bounded, described and platted as follows, with magnetic variation seventeen degrees and twenty minutes east,

Beginning at corner No. 1 a pine post four inches square marked U. S. 690 P. 1. with mound of stones being also corner No. 1 of Lot No. 689, the Conkling lode claim.

Thence first course north twenty-one degrees and nine [m-]nutes west, three hundred feet to discovery point, six hundred feet to corner No. 2 a pine post four inches square marked U. S. 690 P. 2., in mound of stones, being also corner No. 2, of said Lot No. 689, corner No. 2, of lot No. 580 the Pirate King lode claim, and corner No. 4 of lot No. 191, the Lincoln lode claim from which U. S. Mineral Monument No. 4 bears north thirty-two degrees and fifty-two minutes west nine hundred and thirty-nine and three-tenths feet distant; and a pine tree four inches in diameter marked U. S. 690 P. 2. B. T. in mound of stones bears north thirteen degrees west thirty-eight feet distant.

Thence second course, north seventy-six degrees and fifty-seven minutes east [nind] hundred and fifty-one and [eigh-]tenths feet to corner No. 3.

Thence third course south twenty-one degrees and nine minutes east one hundred and thirty-eight and eight tenths feet intersect line 2-3 of Lot No. 342, the Pay Rock No. 2 lode claim, at north seventeen degrees and twenty minutes east one hundred and thirty-two and four-tenths feet from corner No. 3, three hundred feet intersect line 3-4 of said lot No. 342 at south seventy-two degrees and forty minutes east one hundred and five and three-tenths feet from corner No. 3, six hundred feet to corner No. 4.

Thence fourth course south seventy-six degrees and fifty-seven minutes west nine hundred and fifty-one and eight-tenths feet to corner No. 1, the place of beginning. Expressly excepting and excluding from these presents all that portion of the ground hereinbefore described embraced in said mining claims or survey No. 342, and also all that portion of said Arthur vein or lode, and of all veins, lodes and ledges, throughout their entire depth, the tops or apexes of which lie inside of such excluded ground; said lot No. 690 extending nine hundred and fifty-one and [eight]-tenths feet in length along said Arthur vein or lode the granted premises in said lot containing twelve acres and [eighty]-two hundredths of an acre of land, more or less."

That under and beneath the surface and within the exterior boundaries of each of said mining claims extended downward vertically, there is a lode or vein of rock in place, bearing silver, lead and other valuable minerals, extending on its course or strike through the length of said claims. That said mining claims and each of them are only valuable for the ores and minerals therein contained.

VII.

That, as your orator is informed and believes, ever since the incorporation of said defendant company the defendant herein has been and still is in possession of said vein or lode within the premises hereinbefore described and all the ores and minerals therein, working and developing the same and extracting said ores and minerals therefrom. Also upon information and belief, your orator alleges that prior to the incorporation of the defendant as hereinbefore alleged, its said grantor and predecessor in interest, the Kearns-Keith Mining Company, was in possession of said vein or lode and all the ores and minerals therein within the planes aforesaid, working and developing the same and extracting the ores and minerals therefrom.

That said defendant and said Kearns-Keith Mining Company gained access to said mining claims and premises and said ores, beneath the surface and within the said boundaries of said mining claims extended downward vertically, by means of extending certain underground works situated upon other property, now owned by the defendant and prior to the incorporation of the defendant company owned by said Kearns-Keith Mining Company and Silver King Mining Company, which were merged into the defendant company as hereinbefore alleged, and to which said underground works your orator herein and its said grantors and predecessors in interest, have had no access or means of access, and from which they have been, and your orator is and has been, excluded by said defendant, except as permitted to enter by the order of the Court herein, made on the thirtieth day of June 1908.

VIII.

That, as your orator is informed and believes, the defendant herein since its said incorporation and said Kearns-Keith Mining Company, the grantor of said defendant, prior thereto by means of said underground works have extracted large quantities of ore from said Conkling and Arthur lode mining claims, within the planes aforesaid. That the ores so extracted by the defendant and its said grantor, said defendant has appropriated and converted to its own use. That the [valu-s] of said ores so extracted by the defendant and its said grantor, your orator is unable to specify with exactness, but upon information and belief alleges the same to exceed in value the sum of one million dollars. (\$1,000,000.00).

IX.

Your orator further alleges that said grantors of your orator did, prior to the commencement of this action, demand from said defendant that it account to them, as tenants-in-common with it in said mining claims, for the ores and minerals by it and its said grantor removed from said premises and disposed of, and for their just and proper share of the value thereof. That said defendant company

failed and refused to give to said grantors of your orator any accounting whatsoever for the ores or minerals by said defendant company extracted and removed from said premises, or to pay to them or either of them their just, or any, proportion of the value thereof.

That after the incorporation of your orator, and after your orator succeeded to the rights and interests of said Nicholas Treweek and J. Leonard Burch in and to said mining claims and each of them, to-wit: on or about the thirtieth day of November 1908, your orator demanded of said defendant an accounting as tenants-in-common in and to said mining claims and for your orator's just proportion of the value of the ores mined from underneath the surface of said Conkling and Arthur lode mining claims, between planes drawn down vertically through the exterior boundaries of said mining claims as herein described. That said defendant company has entirely ignored said demands and failed and neglected to make answer thereto, except as hereinafter alleged, and refused to let your orator into the possession of either of said mining claims, or to in any manner account to or with your orator in the premises.

X.

That the defendant asserts, pretends and claims an exclusive interest (not as tenant-in-common with your orator) in a portion of said premises, to-wit; the southwest one hundred thirty-five and one-half (135.5) feet of said Conkling lode mining claim, as hereinbefore described, adverse to your orator, and to have exclusive right and ownership of all the ores contained therein within planes extended downward vertically from the following described lines, to-wit: Bounded on the south-west by the southwest end line of
8 said Conkling claim as hereinbefore bounded and described, and on the north-east by a line drawn parallel thereto and one hundred and thirty-five and five-tenths feet distant therefrom, and by the respective side lines of said Conkling mining claim as hereinbefore described, and said defendant has given out in speech, and otherwise, that it has the exclusive right to enter in and upon said premises and remove ore therefrom without accounting to your orator as a tenant-in-common with it as aforesaid, because of its alleged ownership of certain overlapping and conflicting mining claims called the Custer No. 2 and Silver Hill No. 4, and also because it asserts that the boundaries of said Conkling claim as described in the patent thereof and herein, are not the proper boundaries thereof to the extent of including the said southwest 135.5 feet of said Conkling claim as hereinbefore described and bounded.

That the alleged claims and pretenses of said defendant are false and untrue, and unfounded in fact; also that by reason of the facts herein alleged the said defendant ought not to be permitted to controvert and vary the location and boundary of said Conkling claim upon the ground as the same are described in said patent and herein, or to assert an interest adverse, to your orator or otherwise, if at all, than as trustee holding the title of said overlapping and conflicting Silver Hill No. 4 and Custer No. 2 lode mining claim- for the benefit

of the defendant and your orator as tenants-in-common in said Conkling lode mining claim, according to their respective interest therein as hereinbefore alleged. That the description of the location of said Conkling lode mining claim, as described herein, is the same and identical description as described in the patent and as patented. That in and by said description contained in said patent, the location of the boundaries of said Conkling lode mining claim can be readily traced, ascertained and determined upon the ground, all of which has, at all of the time herein mentioned, been well known to said Kearns-Keith Mining Company and to the defendant herein, as your orator verily believes. That ever since said Conkling lode mining claim was patented, the owners of said claim have never had any dispute or contention over or disturbances of their ownership and right of possession of said Conkling lode mining claim as described herein and as located upon the ground by said description contained herein and in said patent, or of or to any part or portion of said claim until the wrongful acts and conduct of the defendant and its said grantor, Kearns-Keith Mining Company, as co-tenant or tenants-in-common with your orator and its grantors as herein alleged.

9

XI.

That the defendant herein and its said grantor Kearns-Keith Mining Company, subsequent to said twenty-second day of September 1903 (actual time of which your orator has no actual means of ascertaining), as your orator is informed and believes, did secretly extend a certain tunnel called the Alliance Tunnel through and underneath said Conkling lode mining claim from the northeast boundary of said claim to the southwest end boundary of said claim; also secretly drove a crosscut extending from said Alliance Tunnel, so extended underneath said Conkling lode mining claim, to near the southwest corner of said Conkling lode mining claim as described in said patent and herein. That said Alliance Tunnel at the time of the incorporation of said Kearns-Keith Mining Company, did not extend to the boundaries of said Conkling lode mining claim, or any part or portion thereof, as your orator is informed and believes. That said tunnel and cross-cut, so extended, are upwards of one thousand three hundred (1,300) feet in depth, below the surface of said Conkling lode mining claim. That said secret openings so made underneath the surface and within the boundary planes of said Conkling lode mining claim, extended downward vertically, can be entered through the main shaft of said Silver King Mining Company and the levels and drifts therefrom, or through said Alliance Tunnel, only; that said shaft, drifts, levels and said Alliance Tunnel are under the exclusive ownership and control of the defendant (except only as to the right reserved to Thomas Kearns, and his assigns, to use said Alliance Tunnel), and prior to said merger during the time aforesaid were under the exclusive ownership and control of said Silver King Mining Company, with the right reserved to said Kearns or his assigns as aforesaid, which said right, so reserved, upon information and belief, your orator alleges said Kearns assigned and

transferred to said Kearns-Keith Mining Company upon its incorporation. That in so drifting and extending said cross-cuts from said tunnel, said defendant, and prior to said merger, said Keath-Kearns Mining Company, secretly discovered and explored a large and valuable ore deposit upon which said Kearns-Keith Mining Company, prior to said merger, and said defendant, subsequent thereto, secretly discovered and explored a large and [valuable] ore deposit, upon which the said defendant and its grantor have made extensive stoping and secretly removed therefrom ore of the value of not less than one million dollars (\$1,000,000.00) as your orator is informed and believes.

XII.

That the description of the said Conkling lode mining claim, as asserted and pretended to be by the defendant herein as aforesaid, is such that it is within the boundary planes of said Conkling lode mining claim, as described in the patent thereof as aforesaid, extended downward vertically, and principally within the boundary planes extended downward vertically, of said southwest 135.5 feet of said Conkling lode mining claim, as hereinbefore described, 10 that the principal part and value of said ore as secretly found and discovered as aforesaid, was and is contained.

That the value of said ores so found and discovered within the planes extended downward vertically from the boundaries of said southwest 135.5 foot strip of said Conkling lode mining claim, as hereinbefore described, is, as your orator is informed and believes, not less than two million five hundred thousand dollars (\$2,500,000.00).

That all of the aforesaid secret underground work and discovery of ore and removal of ore were intentionally and wrongfully kept secret by the said defendant and by its grantor, the Kearns-Keith Mining Company, and from your orator's grantors and predecessors in interest, Nicholas Treweek and J. Leonard Burch, as your orator is informed and believes, and unknown to them or either of them until as hereinafter alleged. That on or about the month of April, 1907, the then owners of the interest now owned by your orator in said Conkling lode mining claim, to-wit, said Nicholas Treweek and J. Leonard Burch, became suspicious that there had been secret developments made in said Conkling and Arthur lode mining claims by the said Kearns-Keith Mining Company, and thereafter, after said merger, applied to said defendant for admission to any underground workings beneath the surface of said Conkling and Arthur lode mining claims; that said application was refused by the said defendant. That thereafter, on or about the month of December 1907, said Nicholas Treweek and J. Leonard Burch, as tenants-in-common with the said defendant in said Conkling lode mining claim as aforesaid, demanded of said defendant an accounting for their respective shares of the proceeds of any and all ores taken from said Conkling and Arthur lode mining claims; that said defendant in response to said demand, expressed great surprise at the demand made

upon it as aforesaid, and reminded said Nicholas Treweek and J. Leonard Burch that the defendant was a co-tenant with them in the ground they claimed, viz; the Conkling and Arthur lode mining claims, and also asserted that it had spent a [great] deal of money in explorations, and claimed the right to remove and extract sufficient ore, had there been any in the said Conkling and Arthur lode mining claims, to repay the said defendant for the money expended in such explorations, before the said Nicholas Treweek and J. Leonard Burch as tenants-in-common with said defendant, could set up any claim for an accounting. That in reference to the demand made for the privilege of entering the workings for the purpose of making an examination and survey, the defendant asserted and contended that such demand, so made, was not with the hope of finding the conditions in reference to the defendant having mined ore in said Conkling and Arthur lode mining claims, as suspected, but charged some ulterior and improper purpose or motive

11 in said demand and request so made by said Treweek and Burch.

XIII.

Your orator further alleges that after the secret discovery by said defendant and its grantor, Kearns-Keith Mining Co., of ore of great value as aforesaid and within that portion of said Conkling lode mining claim hereinbefore referred to as the southwest 135.5 feet thereof, and said Kearns-Keith Mining Company the predecessor in interest and grantor of the defendant, herein, as aforesaid, prior to the incorporation of the defendant, to-wit, in the years 1906 and 1907, made and caused to be made cunning efforts to purchase the interest in said mining claims owned by said Treweek and said Burch, representing that said interests were of no special value, and offering to pay for said interest the sum of fifteen thousand dollars (\$15,000.00) and no more. That the first suspicion that said Treweek and Burch had of the possibility of there having been underground developments made in said Conkling and Arthur lode mining claims as aforesaid, arose after the last attempt of said Kearns-Keith Mining Company to purchase their interest in said Conkling and Arthur lode mining claims for said sum of fifteen thousand dollars (\$15,000.00) and after the purchase of said Custer No. 2 and Silver Hill No. 4 mining claims, as herein alleged.

XIV.

Your orator further alleges that after failing to purchase the interest of said Treweek and Burch in said Conkling and Arthur lode mining claims, as aforesaid, the defendant's said grantor, Kearns-Keith Mining Company, did thereafter, and during the month of April 1907, purchase from the Belmont Mining Company, a corporation, for a consideration not exceeding one hundred fifty thousand dollars (\$150,000.00) as your orator is informed and believes, the Custer No. 2 and the Silver Hill No. 4 lode mining claims, then

owned by the said Belmont Mining Company, and took a conveyance for the same in the name of said Thomas Kearns, Trustee, who was then the President or Manager of said Kearns-Keith Mining Company. That upon the incorporation of the defendant herein

12 said Thomas Kearns, as Trustee, wrongfully conveyed the said mining claims, and the whole thereof, exclusively to the defendant herein.

That said Custer No. 2 and Silver Hill No. 4 lode mining claims, Survey No. 4850, were, by Letters Patent dated June 2, 1904, granted from the United States of America to the Belmont Mining Company. That said patent was based upon location notices antedating the location of said Conkling lode mining claim. That as patented, said Custer No. 2 and Silver Hill No. 4 lode mining claims, overlap and include a large area of said Conkling lode mining claim as patented and described in the patent thereof and herein, including within said overlap all of the area of said Conkling lode mining claim included within the southwest 135.5 foot strip thereof, except only a small area at the northwest corner of said Conkling lode mining claim as herein described and particularly included within said overlap, all that portion of said 135.5 foot strip wherein said ore was discovered and contained as aforesaid.

That during all of the period aforesaid, while the said Treweek and Burch and the said Kearns-Keith Mining Company were tenants-in-common as aforesaid in said Arthur and Conkling lode mining claims, the said Kearns-Keith Mining Company and said Treweek and Burch were as tenants-in-common as aforesaid, in the actual possession of said claims and each of them, to the full extent and area thereof as herein specifically described, including said southwest 135.5 foot strip of said Conkling claim as herein described. That said purchase from said Belmont Mining Company of said Custer No. 2 and Silver Hill No. 4, was made as hereinbefore alleged while said Kearns-Keith Mining Company and said Treweek and Burch, as tenants-in-common, were in the possession as aforesaid of said Arthur and Conkling claims, including all the aforesaid overlapping area thereof covered by said Custer No. 2 and Silver Hill No. 4 lode mining claims. That at and prior to the time of the purchase of said Custer No. 2 and Silver Hill No. 4 mining claims as aforesaid, no ore had been found or developed within the said claims or either of them as your orator is informed and believes, except the aforesaid ore bodies developed prior to said purchase within said area overlapping said Conkling mining claim as herein described and as patented, and as then and during all the times prior thereto while said Treweek and Burch and said Kearns-Keith Mining Company as tenants-in-common and said Conkling claim as aforesaid were as such tenants-in-common and not otherwise.

13 in the lawful and actual possession thereof as part and parcel of said Conkling lode mining claim.

That until the purchase by the said Kearns-Keith Mining Company of the said Custer No. 2 and Silver Hill No. 4 lode mining claims, neither the said defendant nor its said grantors held or claimed any right or interest in or to the premises described in the

patent of said Conkling lode mining claim, or in or to the lodes or veins within the boundary planes thereof as described in said patent, or in or to the southwest 135.5 foot strip, or in or to the lodes or veins therein, except the right and interest held by the said defendant and its said grantor, the said Kearns-Keith Mining Company, as tenant in common with your orator and its predecessors in title under the patent and grant from the United States of America of the Conkling mining claim hereinbefore set forth; and after said purchase neither the said Kearns-Keith Mining Company, nor the defendant made any independent claim nor any claim at all adverse to your orator, or adverse to the said Treweek and Burch in or to said premises or any part thereof until on or about the 11th day of April, 1908.

That in the secret extension of said Alliance Tunnel as hereinbefore set forth and continuously during the progress of said work, the said defendant and its said grantor carried on said work, claiming to be so operating as tenants-in-common with your orator and your orator's predecessors in title, said Treweek and Burch, and for the discovery and development of ore within the exterior boundaries extended downward vertically of said Conkling mining claim, and claimed of and from its co-tenants, payment and reimbursement out of the ores developed in said Conkling mining claim for the cost and expense incurred in said work. That while so carrying on said work as such tenant-in-common as aforesaid and while claiming to be carrying on the same for the development of said properties, so held and claimed in common, and while claiming reimbursement, by reason of said co-tenancy, out of the ores within said Conkling claim for the cost and expense of extending said tunnel, the defendant's said grantor, the said Kearns-Keith Mining Company, secretly discovered said ore body within said 135.5 foot strip, and fraudulently contriving to deprive its cotenants of their just and any proportion of the value of said ore, and contriving and intending to secure to the said defendant's grantors, the benefit of the whole thereof, the said Kearns-Keith Mining Company secretly and without informing your orator's predecessors in title of the discovery of said ores, purchased as aforesaid said Custer No. 2 and Silver Hill No. 4 mining claims, and thereafter held the same secretly, and after developing the said ground and fully ascertaining the extent of said ore bodies and the value of the ore contained therein,—for the first time made known to your orator's predecessors in title that the said Kearns-Keith Mining Company claimed adversely said 135.5 foot strip, and for the first time, pretended and claimed
 14 that said 135.5 foot strip was not within the boundaries or planes of said Conkling Mining claim.

That said Kearns-Keith Mining Company secured title to said Custer No. 2 and Silver Hill No. 4 mining claims by reason of its possession of said premises under its claim thereto as tenant in common and under its claim that the same was part of the Conkling mining claim, and purchased said Custer No. 2 and Silver Hill No. 4 mining claims because of its knowledge obtained while extending said tunnel (and while in possession as tenant-in-common with your

orator's predecessors in title of the valuable ore body within said 135.5 foot strip)—contriving and intending by means of such adverse claims, to deprive your orator and its predecessors in title, of the ore discovered and partially extracted and sold by the said Kearns-Keith Mining Company while in possession of said property and of said 135.5 foot strip as tenant in common with your orator's predecessors in title, the said Treweek and Burch. That the said pretensions of the said defendant that the boundaries of said Conkling lode mining claim as described in the patent and herein are not its true boundaries, but that the southwest 135.5 feet of said Conkling lode mining claim, as the same is bounded and described in the patent and herein, should not be included therein when located upon the ground constituted the first notice that said Treweek and Burch, or either of them, ever [had] that any such claim, pretension or contention existed, from any source whatsoever. That said claim and assertion first came to the notice or knowledge of said Treweek or Burch, or either of them, on or about the 11th day of April, 1908, as your orator is informed and believes.

XV.

Your orator further alleges that under and pursuant to an order of this Honorable Court, made herein on the thirtieth day of June, 1908, permitting the then complainants herein, Nicholas Treweek and J. Leonard Burch, with their experts, agents and surveyors, the free and unmolested right to enter upon the aforesaid underground workings for the purpose, among other things, of measuring and determining the amount and value of the ore that had been mined by the said defendant company underneath the surface of said Conkling and Arthur lode mining claims, the said Treweek and Burch were able for the first time to, and did, ascertain the actual facts in respect to said secret underground workings as aforesaid, underneath the surface boundaries of said Conkling lode mining claim as described in said patent and herein, within planes extended downward vertically, and of the location of the ore body within said Conkling lode mining claim, and the character and extent of the ore body developed therein, and of the importance and great value of said Conkling lode mining claim, which is only valuable for the ores therein contained.

XVI.

Your orator further alleges, upon information and belief, that the said defendant herein since it succeeded to the interest of said Kearns-Keith Mining Company in said Conkling lode mining claim as aforesaid, and the said Kearns-Keith Mining Company prior thereto and subsequent to its purchase aforesaid, and while said companies were respectively as aforesaid tenants-in-common with said Treweek and Burch in said Conkling and Arthur lode mining claims, and the discovery of ore therein and the extraction and removal of ore from said Conkling lode mining claim, for the pur-

pose of taking wrongful and undue advantage of said Treweek and Burch, as co-tenants as aforesaid, endeavored to purchase their said three-fourths interest therein for a trifling sum compared with the actual value as then known exclusively to the said defendant herein, and its said grantor, the Kearns-Keith Mining Company.

XVII.

Your orator further alleges, upon information and belief, that said overlapping junior patented claims, to wit, the Custer No. 2 and Silver Hill No. 4 were purchased as aforesaid without the knowledge, acquiescence or consent of said Treweek and Burch, or either of them, for the purpose and with the intention of defrauding said Treweek and Burch, and your orator, as tenants-in-common with the said defendant and its grantor, the Kearns-Keith Mining Company, in said Conkling lode mining claim, as aforesaid, out of their just and proper rights in the premises, and particularly from that portion of said Conkling lode mining claim wherein the principal part and value of said ore, so secretly discovered as aforesaid, is contained. Also that the attempt on the part of the defendant herein to describe and locate the said Conkling lode mining claim so as to exclude the southwest 135.5 feet thereof, as aforesaid, is made with a like intention and purpose, as your orator is informed and believes. That neither your orator, [not] its said grantors, Nicholas Treweek and J. Leonard Burch, were ever notified by said defendant or its grantor, Kearns-Keith Mining Company, as it and they were in duty bound to do, of said purchase of said Custer No. 2 and Silver Hill No. 4 mining claims, or permitted to participate in said purchase. That ever since said purchase of said Custer No. 2 and Silver Hill No. 4 claims, as aforesaid, your orator since its incorporation has been, and prior thereto said Treweek and Burch were, and your orator still is, ready, able and willing to pay and contribute to the defendant for its proper share and proportion, to wit, three-fourths ($\frac{3}{4}$) of the purchase price paid to said Belmont Mining Company for said claims, or such other or further sum as to your Honors may seem meet; and here and now offers to pay the same as this Honorable Court may direct. That by reason of said purchase of said claims by said defendant, your orator is, and its grantors have been, greatly and wrongfully prejudiced as tenants-in-common as aforesaid with said defendant and its said grantor in said Conkling lode mining claim.

XVIII.

And your orator further shows and alleges that the survey of said Conkling lode mining claim purports to have been made in November of the year 1889 by Adolph Jesson, now deceased, then Deputy United States Mineral Surveyor; that all other persons connected with the making of said survey of said Conkling lode mining claim, are either dead or their whereabouts are unknown, as plaintiff is in-

formed and believes; that said Conkling lode mining claim is situated in a rough country, at a high altitude; that the surface is covered in part with large trees and thickets of brush and undergrowth; that the yearly snow-fall in the winter is very great; that none of the original marks or boundaries of said Conkling lode mining claim referred to in said patent are now standing; that the original place where the respective corners were marked, if marked at all, is now only a matter of speculation. That the defendant herein has upwards of forty (40) miles of underground workings, as your orator is informed and believes, which have been made by it and the companies which it succeeded, as hereinbefore alleged, and thereby it has, and they were enabled to secretly explore and determine the course, strike and dip of the mineral bearing veins and lodes; including the territory wherein the said Conkling lode mining claim is situated; and with such knowledge and information, so gained, the said defendant and the said parties to which it succeeded as aforesaid have, as your grantor is informed and believes, since secretly discovering said ore deposits, been secretly scheming and designing ways and means, by the methods hereinbefore alleged and otherwise, to attempt to secure to the defendant exclusively the said southwest 135.5 feet of said Conkling lode mining claim, as described in said patent and herein. [withour] informing your orator, or its predecessors in interest, as tenants-in-common in said Conkling lode mining claim, as hereinbefore alleged, or any of its aforesaid secret acts, doings or intentions, thereby leaving your orator, at this late date, entirely helpless in the premises to meet the contentions now made by said defendant in reference to the boundaries of said Conkling lode mining claim being other than as described in said patent and herein.

17

XIX.

And your orator further shows and alleges that the said defendant's duty as tenants-in-common with your orator and its said predecessors in interest in said Conkling mining claim, was and is to protect the entire extent and area of said claim, as described in the patent thereof, and secure, if possible so to do, the entire area thereof, as described in said patent, and not to destroy or defeat the same in any manner or to any extent whatsoever, nor acquire or attempt to acquire any adverse interests in and to the ground as bounded and described in said patent and herein, or in or to the minerals therein contained within planes bounded by the boundaries of said Conkling and Arthur lode mining claims, as described in said patent and herein, extended downward vertically.

That neither the Government of the United States nor any third party, or party not interested in said Conkling lode mining claim as patented and described in the patent, does now dispute or contest, or ever has disputed or contested, to the best of your orator's knowledge, information and belief, the exterior boundaries of said Conkling lode mining claim as described in the patent and in this Amended Bill of Complaint herein.

In Consideration Whereof and forasmuch as your orator has no sufficient remedy at law for the wrongs done and threatened to be done, and that the remedy at law is inadequate and can afford no protection to your orator against the unlawful and wrongful claims and assertions of said defendant, and the waste done and threatened to be done for the reasons hereinbefore stated, and is only relievable in a Court of Equity where matters of this kind are properly cognizable and reviewable.

Your orator, to the end that it may obtain the relief to which it is justly entitled in the premises, Prays:

First. That the defendant show, if it can, why your orator should not have the relief prayed, and make full disclosure and discovery of all the matters aforesaid, and, according to the best and utmost of its remembrance, knowledge, information and belief, full, true, direct and perfect answer make to the matters hereinbefore stated
18 and charged, but not under oath, answer under oath being expressly waived.

Second. That the defendant be required to set forth any and every adverse interest, claim or demand in and to the said above described premises as herein specifically bounded and described, and to the ores and minerals therein contained, to the end that the same may be justly adjudicated and declared null and void as against your orator, except only as to an undivided one-fourth ($\frac{1}{4}$) interest therein as tenant-in-common with your orator; and that the title and ownership of your orator to an undivided three-fourths ($\frac{3}{4}$) interest in said Conkling and Arthur lode mining claims, as specifically hereinbefore described, and to the ores and minerals contained therein vertically beneath the surface boundaries thereof as hereinbefore described, be established and confirmed as against any and all claims of the said defendant, and all cloud thereon forever removed.

Third. That an accounting be taken by and under the direction and decree of this Honorable Court, and the amount, quality and value of the ores and minerals removed by said defendant company from said premises described as aforesaid be ascertained and determined; and that, upon such accounting being had and the value of such ores ascertained and determined, your orator may be decreed to be the owner of three-fourths ($\frac{3}{4}$) of the sum so ascertained, and that the said defendant company be required to pay the same to your orator.

Fourth. That your Honors grant unto your orator your Writ of Injunction, commanding the said defendant, its servants, agents and employees, and all persons under its authority, direction or control, until the final determination of this action, to absolutely desist and refrain from entering into or upon any portion of said Conkling and Arthur lode mining claims as hereinbefore described, or either of them, and from working in or upon said premises or beneath the surface thereof, or taking any ores or minerals therefrom at any

point upon or beneath the surface of said premises herein described extended downward vertically; or, that your Honors in lieu of an injunction as prayed for, appoint a receiver herein impending the final determination of this action, and that such receiver be empowered and authorized to enter into the joint or common possession of said Conkling and Arthur lode mining claims, as they are bounded and described in this Amended Bill of Complaint, with the defendant company, and said receiver and said defendant company

19 continue the further mining and disposing of the ores now developed and that may hereafter be found and developed lying underneath the surface of said Conkling and Arthur lode mining claims, and confined between the vertical planes drawn down through the exterior boundaries of said mining claims as hereinbefore described under such suitable provisions as your Honors may deem best.

Fifth. That the said defendant be adjudged and decreed to have purchased and to hold the said Custer No. 2 and Silver Hill No. 4 mining claims, in trust for your orator and said defendant as tenants-in-common in said Conkling and Arthur lode mining claims, according to their respective shares, viz, an undivided three-fourths ($\frac{3}{4}$) interest for your orator and an undivided one-fourth ($\frac{1}{4}$) interest for said defendant.

And for such other and further relief as the equity of the case may require, and as to your Honors may seem meet, and for its costs of suit in this behalf wrongfully expended.

(Signed)

CHARLES C. DEY,

A. L. HOPPAUGH,

Solicitors for Complainant.

UNITED STATES OF AMERICA,
District of Utah,
County of Salt Lake, ss:

J. Leonard Burch, being first duly sworn, deposes and says: That he is an officer of the Complainant herein, Conkling Mining Company, to-wit, the Treasurer thereof; that he has read the above and foregoing Amended Bill of Complaint, and knows the contents thereof; that the same is true of his own knowledge, except as to matters therein stated upon information and belief, and as to these matters he believes it to be true.

(Signed)

J. LEONARD BURCH.

Subscribed and sworn to before me, this 29th day of June, A. D. 1909.

[SEAL.]

G. W. PARKS,

Notary Public.

My commission expires January 4th, 1910.

Amended Bill filed July 5, 1909.

JERROLD R. LETCHER,

Clerk.

(Answer to Amended Bill of Complaint.)

20 The answer of the Silver King Coalition Mines Company, a corporation, defendant above named, to the Amended Bill of Complaint of the said complainant above named.

This defendant now and at all times hereafter, saving to itself all and all manner of benefit of exception or otherwise that can or may be had or taken to the many errors, uncertainties and imperfections in the said amended bill contained, for answer thereto, or to so much thereof, as this defendant is advised it is material or necessary for it to make answer to, answering says:

This defendant admits that on or about the 17th day of September, A. D. 1908, Nicholas Treweek and J. Leonard Burch, the original complainants herein, caused the complainant to be incorporated under the laws of the State of Utah, and did thereupon convey to said complainant corporation all of the right, title and interest in and to the Conkling lode mining claim, patented as U. S. Lot No. 689, and the Arthur lode mining claim, patented as U. S. Lot No. 690, situated in the Uintah Mining District, County of Summit, State of Utah, and did also assign and transfer to said complainant corporation all manner of actions, causes of action, suits, demands, controversy and accounting of every kind and nature whatever in favor of said Treweek and Burch and against the defendant herein, but as to whether or not the capital stock of said complainant corporation was paid for upon the incorporation of said company by the conveyance of said above named mining claims, or any interests therein, and also by the assignment mentioned in said complaint, this defendant has no knowledge or information thereof, and leaves said complainant to make such proof thereof, as it may be advised.

This defendant admits that it is a corporation, organized and incorporated under the laws of the State of Nevada, on or about the Month of May, 1907, but denies that it was so organized for the purpose of taking over the Kearns-Keith Mining Company or the Silver King Mining Company respectively corporations.

This defendant admits that it succeeded to the interest theretofore owned by said Kearns-Keith Mining Company in and to the Arthur and Conkling lode mining claims, and that such interest was an undivided one-fourth interest therein.

Admits that on the 22nd, day of September, 1903, the said Kearns-Keith Mining Company was the owner of said undivided one-fourth interest in and to said Conkling and Arthur lode mining claims, and from thence continued to be the owner thereof until said Kearns-Keith Mining Company conveyed and transferred said interest to the defendant above named, which said conveyance or transfer was made on, to-wit, the 31st day of May, A. D. 1907, and not on the 29th day of May, 1907.

21 That as to whether or not one Nicholas Treweek was the owner of an undivided one-half interest in and to each of said Conkling and Arthur lode mining claims, during all or any of the times,

that said Kearns-Keith Mining Company was the owner of an undivided one-fourth interest therein, this defendant has no knowledge or information thereof, and leaves said complainant to make such proof thereof as it may be advised; and as to whether the said Treweek upon the transfer by said Kearns-Keith Mining Company to the defendant herein was the owner of an undivided one-half interest in said mining claims and each of them, and from thence continued to be the owner of such interest in common until the transfer by him to the complainant herein, this defendant has no knowledge or information thereof, and therefore leaves said complainant to make such proof as it may be advised.

That as to whether or not the said J. Leonard Burch was the owner, on or about the 16th day of May, 1906, or ever was, at any other time, the owner of an undivided one-fourth interest in and to said Conkling and Arthur lode mining claims, and that from thence as such owner he became or was the tenant-in-common with said Kearns-Keith Mining Company in said mining claims, or either of them, until the transfer by said Kearns-Keith Mining Company of its interest in and to said claims to the defendant herein, and that since the time of said transfer he ever was a tenant in common with the defendant herein to said claims or either of them, until he transferred his interest to the complainant herein, this defendant has no knowledge or information thereof, and therefore leaves said complainant to make such proof thereof as it may be advised.

This defendant admits that on or about the 23rd, day of February, 1892, the United States of America, by its letters patent, granted unto the Boss Mining Company, a corporation, those certain premises called the Conkling and Arthur lode mining claims respectively, situated in the Uintah Mining District, County of Summit, State of Utah, and that in said patent said Conkling lode mining claim was particularly bounded and described as in the 5th paragraph of said amended bill of complaint set forth, and that in and by the terms of said patent the said Arthur lode mining claim is particularly bounded and described as set forth in said 5th, paragraph of said amended complaint, but this defendant alleges that the description and boundaries of said claims, as set forth in said fifth paragraph of said amended bill of complaint, is not a true or correct description of either of said mining claims as the same are bounded and described and limited upon the ground by the permanent monuments, objects and bearing-trees found upon the ground, and alleges that the said Conkling lode mining claim, U. S. Lot No. 689, and the Arthur lode mining claim, U. S. Lot No. 690, as the same are actually found upon the ground, are particularly described and bounded as follows, to-wit:

Commencing at corner No. 2, the northeast corner of the Conkling claim and the northwest corner of the Arthur claim, a common corner of said Conkling and Arthur claims, from which U. S. Mineral Monument No. 4 bears north 32 deg. 52 min. west 939.3 feet distant, thence from said corner south 61 deg. 21 min. west

1364.5 feet to corner No. 3, the northwest corner of said Conkling claim, thence south 21 deg. 09 min. east 600 feet to corner No. 4, the southwest corner of said Conkling claim, thence north 61 deg. 21 min. east 1364.5 feet to corner No. 1 the southeast corner of said Conkling claim, and also corner No. 1 and the southwest corner of said Arthur claim, and thence north 76 deg. 57 min. east 951.8 feet to corner No. 4, the southeast corner of the Arthur claim, thence north 21 deg. 09 min. west 600 feet to corner No. 3, the northeast corner of said Arthur claim, and thence south 76 deg. 57 min. west 951 feet to corner No. 2, the northwest corner of said Arthur claim and the place of commencement of surface bounds. The line of division between said mining claims runs north 21 deg. and 9 min. west from said common corner No. 1 to said common corner No. 2.

This defendant admits that beneath the surface and within the exterior boundaries, extended downward vertically, of each of said mining claims, there is a lode or vein of rock in place, bearing silver, lead and other valuable minerals, which, on its course or strike, extends throughout the length of said claims; and admits that said mining claims and each of them are valuable only for the ores and minerals therein contained, but this defendant alleges that no part or portion of the top or apex of the said lode or vein of rock in place, found beneath the surface of the said mining claims, as above admitted, is found anywhere within the exterior boundaries, extended downward vertically, of said claims, or either of them, but that the top or apex of said lode or vein, and the whole thereof, is found and contained within the surface boundaries, extended downward vertically, of certain other mining claims, owned and possessed by this defendant, as hereinafter in this answer more particularly alleged and described, which said other claims lie northerly from said Conkling and said Arthur Mining claims.

This defendant denies that ever since the incorporation of this defendant, it has been, or still is, or ever was, in the possession of the vein or lode described in the amended complaint herein, as within or beneath the boundaries of either the said Conkling or Arthur lode mining claims, or all or any of the ores or minerals therein, except as hereinafter alleged; and denies that it

23 is, or has been, since the incorporation of said defendant, working or developing any vein or lode within the boundaries of said Conkling and Arthur lode mining claims, extended downward vertically, or is, or ever has been, extracting any ores or minerals therefrom, except from the vein or lode so apexing as aforesaid in other mining claims owned by this defendant it extracted from beneath the surface of the said Conkling lode mining claim not to exceed 990 tons of ore, of all grades or classes. And this defendant alleges that the value of all the ore hitherto mined by this defendant from within the surface boundaries, extended downward vertically, of the said Conkling mining claim, after deducting therefrom the reasonable and necessary cost and expense of mining and disposing of said ores, does not exceed the sum of

\$20,047.50. And this defendant further alleges that the reasonable and necessary cost and expense incurred by it in the discovery and development of all ores hitherto mined or removed by it from within the exterior boundaries, extended downward vertically, of the said Conkling mining claim, exceeds the sum of \$72,500. And this defendant further alleges that it has not, at any time hitherto, mined or extracted any ores whatever from within the exterior boundaries, extended downward vertically, of the said Arthur lode mining claim. And this defendant denies that the said Kearns-Keith Mining Company ever, at any time, was in possession of said vein or lode, or all or any of the ores or minerals therein, within or beneath the surface of either the said Conkling or the Arthur lode mining claims, and denies that it was working or developing the same, or extracting any ores or minerals therefrom whatever.

This defendant admits that it and the said Kearns-Keith Mining Company gained access to said mining claims, beneath the surface thereof, and within the exterior boundaries thereof, extended downward vertically, by means of certain underground works situated upon other property, then and now owned by this defendant and its predecessors in interest; but this defendant denies that said complainant is, or that it has been, or that any of its predecessors in interest have been excluded by this defendant from access to any of the workings of this [defendants], on or beneath the surface of either the said Conkling or the said Arthur mining claims. And this defendant denies that it has since its incorporation, or that said Kearns-Keith Mining Company, grantor of said defendant, has extracted large or any quantities of ore from said Conkling or said Arthur lode mining claims, except as hereinbefore admitted; and denies that the ores so extracted by said defendant from beneath the surface of said Conkling lode mining claim, as hereinbefore admitted, exceed the sum of one million dollars, or any other sum whatever, except \$20,047.50; and this defendant alleges, as it has hereinbefore

24 alleged, that the reasonable and necessary cost and expense incurred by it in the discovery and development of all said ores, so heretofore mined by it from within the exterior boundaries extended downward vertically, of the said Conkling claim, exceeds the sum of \$72,500. And this defendant denies that the grantors of said complainant, prior to the commencement of this action, did demand from said defendant that it account to them, as tenants in common, with it of said mining claims, of the ores and minerals by it and its grantors removed from said premises and disposed of, or for their just and proper share or value thereof; but admits that said complainant and its predecessors did demand that said defendant account to them for ores and minerals taken and removed by said complainant from property and premises in which neither said complainant nor any of its predecessors in interest ever, at any time, had any estate, right, title or interest whatever. And this defendant admits that after the incorporation of said complainant and after it succeeded to the rights and interest of said Nicholas Treweek and J. Leonard Burch in and to the said Conkling and Arthur mining claims, it did, on or about the 30th day of November, 1908, demand

an accounting by this defendant for the value of the ores mined by it from beneath the surface of the said Conkling mining claim.

Admits that said defendant Company has entirely ignored said demand and refused and neglected to make answer thereto, and refused to account to said complainant for the value of any ores by it mined or removed from beneath the surface of said Conkling lode mining claim, and this defendant alleges that it was not, at said time, and never has been, obligated to account to said complainant, or any of its predecessors in interest for any ores mined or extracted by it from beneath the surface of the said Conkling lode mining claim, or any other mining claim then owned, held or possessed by said complainant or any of its predecessors, in interest.

This defendant admits that it asserts, pretends and claims an exclusive interest not as tenant in common with the complainant herein, in and to the southwest 135.5 feet of the premises attempted to be described in said amended complaint [as] a part and portion of the said Conkling lode mining claim, adverse to said complainant, and admits that it claims and asserts that it has the exclusive right and ownership of all the ores contained therein, within planes extended downward vertically from the lines described in the tenth paragraph of said amended bill of complaint, and admits that said defendant has given out in speech and otherwise that it has the exclusive right to enter in and upon said premises and remove therefrom, without accounting to said complainant as a tenant in common with it, as aforesaid, or otherwise, because of its ownership of the said premises in which said ores and minerals are contained; and admits that it asserts that the boundaries of the said Conkling mining claim, as described in said amended complaint herein, are not the proper boundaries thereof, to the extent of including the said 135.5 feet, alleged by said complainant to be embraced within the boundaries of said Conkling mining claim; but this defendant denies that any part or portion of said 135.5 feet, so owned by this defendant as aforesaid, belongs to or is embraced within the said Conkling lode mining claim, and denies that the Custer No. 2 and Silver Hill No. 4 lode mining claims, mentioned in said tenth paragraph of said complaint, so far as said 135.5 feet are concerned, overlap or conflict at all with said Conkling lode mining claim, and this defendant denies that its claims and pretensions as to the ownership of said 135.5 feet are false or untrue or unfounded in fact; and denies that by reason of any of the facts alleged in said amended bill of complaint, said defendant ought not to be permitted to vary the location or boundaries of the said Conkling lode mining claim upon the ground, as the same are described in said amended bill of complaint, or to assert an interest adverse to said complainant in and to said 135.5 feet, and denies that said defendant should be held as trustee of the title of any part or portion of said Custer No. 2 or the Silver Hill No. 4 lode mining claims, for the benefit of said complainant, as a [tena-t] in common with said defendant, or otherwise, or at all.

This defendant denies that the description of the location of said Conkling mining claim, as described in said amended bill, is the

same or identical description, as described in the patent and as patented, and on the contrary this defendant alleges that the true description of said Conkling lode mining claim, is as appears from the patent and the field notes, which are a part thereof, and the return of the surveyor making the said survey of the said Conkling lode mining claim; that a true and correct description of said Conkling lode mining claim is as hereinbefore in this answer set forth; and this defendant denies that in and by the description contained in said amended bill of complaint, the location of the boundaries of said Conkling lode mining claim can be readily or at all traced, ascertained or determined upon the ground, and denies that said or any alleged tracing, from the description set forth in said amended complaint of said Conkling lode mining claim, at all or any of the times mentioned in said amended bill of complaint, was well or at all known to said Kearns Keith Mining Company, or to this defendant,

26 or to any other person or persons whomsoever, and this defendant admits that ever since said Conkling mining claim was patented, the owners of said claim have never had any disputes or contention over or disturbance of their ownership or right of possession of said Conkling lode mining claim, as the same is located upon the ground; but denies that the said Conkling lode mining claim is or can be located upon the ground as the same is described in said amended complaint herein, and alleges that said Conkling lode mining claim, as the same exists upon the ground, as determined by the monuments, permanent objects and bearing-trees called for in the field notes of the survey of said claim, embraces the premises and none others, as the same are described hereinbefore in this answer, and do not include any part or portion of said 135.5 feet, claimed by the complainant herein, and that the said premises as described herein, exclusive of said 135.5 feet, are the premises had and held by this defendant and its predecessors in interest, and the other owners of said claims, as tenants in common with this defendant and its predecessors in interest, without dispute or contention, and that no contention as to the locus of said Conkling lode mining claim has ever at any time been made or communicated to this defendant, or any of its predecessors in interest, until the filing of the complaint in this action and the alleged description thereof, as set forth in said complaint, and denies that this defendant has been guilty of any wrongful acts or conduct whatever, or that its grantor and predecessor in interest, Kearns-Keith Mining Company, has been guilty of any wrongful act or conduct whatever. And this defendant denies that it or its predecessor in interest, the Kearns-Keith Mining Company or any other person whomsoever, at any time whatever, either before or after the 22nd day of September 1903, extended secretly the Alliance Tunnel, or any other workings through or underneath the Conkling lode mining claim, as alleged in said complaint or otherwise, or that they, or either of them, secretly drove any cross-cut or other working from said Alliance Tunnel, or otherwise, to or near the southwest corner of said Conkling lode mining claim, as the same is described in said patent, or in said amended complaint.

This defendant admits that the openings underneath the surface and within the boundary planes of the Conkling lode mining claim, extended downward vertically, can be entered through the main shaft of the Silver King Mining Company, and from the levels and drifts therefrom, or through said Alliance Tunnel, and that said shaft, drifts, levels and said Alliance Tunnel are under the exclusive control and ownership of the defendant, and were under the exclusive ownership and control of the said Silver King Mining Company,

with the reserved right in said Thomas Kearns, as alleged in said amended complaint, until the incorporation of the Kearns-Keith Mining Company. And this defendant denies that in drifting and extending the cross-cut from said Alliance Tunnel, and prior to the conveyance by said Kearns-Keith Mining Company, the said Kearns-Keith Mining Company secretly discovered or explored a large or any valuable ore deposit. And denies that this defendant, or its said grantor, have made extensive or any stoping, or secretly removed from any part or portion of said Conkling lode mining claim ore of the value of \$1,000,000 or any other sum, except the sum of \$20,047.50 as hereinbefore in this answer alleged. And this defendant denies that the description of the said Conkling lode mining claim, as asserted and claimed by this defendant herein, is such that it is within the boundary planes of the said Conkling lode mining claim, as alleged to be described in the patent thereof, extended downward vertically, and denies that the 135.5 feet, claimed by said complainant in said amended bill of complaint to be part and parcel of said Conkling lode mining claim, is any part or portion thereof, or belongs thereto, or that said complainant or any of its predecessors in interest, have any estate, right, title or interest in or to any part or portion of said 135.5 feet, or in or to any part or portion of the ores or minerals therein contained, vertically beneath the surface thereof. And this defendant denies that the value of the ores found or discovered within the planes extended downward vertically of said 135.5 foot strip, is not less than the sum of \$2,500,000 or of any greater value than the sum of \$—. And this defendant denies that all or any of the underground work or discovery of ore, or removal of ore, by it, was intentionally or wrongfully or at all kept secret by this defendant, or its predecessors in interest from said complainant, or any of its predecessors in interest, Nicholas Treweek and J. Leonard Burch, or any other person, and this defendant alleges that as to what suspicions the predecessors in interest of said complainant had, this defendant has no knowledge or information thereof, and leaves said complainant to make proof as it may be advised. And this defendant denies that it refused permission to said predecessors in interest of said complainant to inspect the underground workings beneath the surface of the said Conkling and Arthur mining claims, and this defendant admits that on or about the month of December 1907, the said Nicholas Treweek and J. Leonard Burch demanded of this defendant an accounting for the proceeds of any or all ores taken from said Conkling and Arthur lode mining claims, but this defendant denies that this defendant expressed great or any surprise at any demand which said Treweek or said Burch might make upon it for ores mined by it from its property,

and admits that it informed the said Treweek and Burch that it had spent a great deal of money in exploration and claimed the right to remove and extract sufficient ore to repay it for the money expended in such explorations before said Nicholas Treweek and said J. Leonard Burch, or either of them, would be entitled to have or receive, as tenants in common with said defendant, any accounting whatever from said defendant.

This defendant denies that the said Kearns Keith Mining Company at any time after the discovery of ore, as alleged in the thirteenth paragraph of said amended bill of complaint, or otherwise, or at all, made or caused to be made cunning or any efforts to purchase the interest in said mining claims owned by said Treweek and said Burch, [a] either of them, or that said Kearns Keith Mining Company, or anyone on its behalf, represented that said interests were of no special value, or that they offered to pay for said interests the sum of \$15,000 and no more; but this defendant alleges that it is a fact that the interest of said Treweek and said Burch at said time, and of said complainant, in and to said Conkling and Arthur lode mining claims, was at said time and is now of no great value for the reason that there has been discovered in and beneath the surface of said mining claims no ores of any especial or great value, and that the ores which have been discovered therein belong to and are part and parcel of a vein or lode having its apex in mining ground and premises owned, held and possessed by this defendant, since its incorporation, and prior thereto by its predecessors in interest, as hereinafter particularly set forth and alleged, and as to when the said Treweek and the said Burch first had any suspicion as alleged in the 13th paragraph of said complaint, this defendant has no knowledge or information, and [therefor] leaves the said complainant to make such proof thereof as it may be advised.

This defendant answering paragraph numbered 14 of said amended bill of complaint, denies that after any failure whatever, at any time whatever, to purchase any interest of said Treweek and Burch, or either of them, in said Conkling and Arthur lode mining claims, as alleged in said amended bill of complaint, or otherwise, or at all, the said Kearns Keith Mining Company did, during the month of April, 1907, or at any other time, or at all, purchase from the Belmont Mining Company, a corporation, for the consideration named in said amended complaint, or any other consideration whatever, the Custer No. 2 and the Silver Hill No. 4 lode mining claims, or either of them, then owned by said Belmont Mining Company, or took a conveyance for the same, or either of them, in the name of Thomas Kearns, Trustee, or any other person whomsoever, and denies that upon the incorporation of this defendant, the said Thomas Kearns, as Trustee, wrongfully conveyed the said mining claims, or either of them, exclusively to the defendant herein, and to the contrary this defendant alleges that on or about, to wit: the 6th day of April, 1907, the said Thomas Kearns, individually, and for and on his own behalf, took and received an assignment of an option theretofore given and granted by the Belmont Mining Company to one D. P. Rohlfing, to purchase the said Custer

No. 2 and the said Silver Hill No. 4 lode mining claims; that thereafter and on or about the 10th day of April 1907, the said Thomas Kearns did offer to the Silver King Mining Company, a corporation, to assign and transfer to it the said option to purchase, so as aforesaid assigned to him, and on to wit; the said 10th day of April 1907, the said Silver King Mining Company did duly accept the offer of the said Thomas Kearns, and did thereupon pay to the said Belmont Mining Company, the portion of the consideration to be paid to it, pursuant to the terms of the said option, and did thereupon direct that the deed from the said Belmont Mining Company should be taken in the name of said Thomas Kearns, as Trustee for said Silver King Mining Company to be conveyed by him to the nominee of said Silver King Mining Company; that on, to wit, the 12th day of April 1907, the said Belmont Mining Company did execute a deed of conveyance to said Custer No. 2 and Silver Hill No. 4 lode mining claims, conveying the said claims and each of them unto the said Thomas Kearns, Trustee, and that thereafter and upon the incorporation and organization of this defendant and on, to wit, the — day of June, 1907, at the request and pursuant to the agreement entered into by and between the said Thomas Kearns and the Silver King Mining Company, and the said Thomas Kearns did convey the said Custer No. 2 and the said Silver Hill No. 4 lode mining claims to this defendant, and that on said day this defendant did complete the purchase of said mining claims and each of them, by paying the balance of the purchase price then due thereon to the said Belmont Mining Company; that at no time whatever did said Kearns Keith Mining Company acquire, have hold, or possess any estate, right, title or interest of, in or to said Custer No. 2 and the said Silver Hill No. 4 lode mining claims, or either of them, or in or to any part or portion of either of them, that no part of the purchase price of said mining claims, or either of them, was paid or discharged by said Kearns Keith Mining Company, or anyone on its behalf, but that the title to said mining claims was purchased and paid for by said Silver King Mining Company and this defendant as aforesaid, for the sole use and benefit of the Silver King Mining Company and this defendant, and not otherwise; and this defendant admits that the said Custer No. 2 and said Silver Hill No. 4 lode mining claims were by letters patent of the United States, dated June 2nd 1904, granted to the Belmont Mining Company, and admits that said patent was based upon location notices antedating the location of said Conkling lode mining claim; and this defendant denies that the said Custer No. 2 and Silver Hill No. 4 lode mining claims overlap or include any part or portion of the area of the said Conkling lode mining claim, included within the said 135.5 foot strip thereof, as set forth and described in said amended complaint, and wrongfully claimed by said complainant to be part and parcel of the said Conkling lode mining claim; and denies that any part or portion of said 135.5 foot strip is embraced within or described or forms any part or portion of the said Conkling lode mining claim.

This defendant denies that at all or any of the times mentioned in said amended bill of complaint, or while the said Treweek and Burch and the said Kearns Keith Mining Company were tenants in common in said Arthur and Con-ling lode mining claims, that either the said Kearns Keith mining company, or the said Treweek or Burch were, as tenants in common, as alleged in said amended bill of complaint, or otherwise or at all, in the actual, constructive or any possession whatever of any part or portion of the said 135.5 foot strip of the said Conkling lode mining claim, as set forth and alleged in said amended bill of complaint, or otherwise, and denies that the purchase by the said Thomas Kearns and this defendant and said Silver King Mining Company, as hereinbefore alleged, of said Custer No. 2 and said Silver Hill No. 4 lode mining claims, or either of them, from said Belmont Mining Company, was at all made while said Kearns Keith Mining Company or said Treweek or said Burch, as tenants in common of said Arthur and Conkling lode mining claims, or either of them, were in the possession of any part or portion of the said 135.5 foot strip, mentioned in said amended complaint, or otherwise, and denies, as it has heretofore denied, that said Kearns Keith Mining Company and said Treweek and said Burch were not, nor was either of them, a tenant in common, the one with the other, of any part or portion of said 135.5 foot strip, or that any part or portion of said 135.5 foot strip ever was, at any time, part or parcel of the said Conkling lode mining claim, and this defendant denies that at the time of the purchase by said Thomas Kearns, Trustee, of said Custer No. 2 and said Silver Hill No. 4 lode mining claims, that any ore bodies whatever had been found or discovered within any part or portion of said 135.5 foot strip, and alleges that no ore was developed or found within said 135.5 foot strip until long after the purchase of said Custer No. 2 and Silver Hill No. 4 lode mining claims, and the conveyance thereof to this defendant, as hereinbefore alleged, and denies as it has hereinbefore denied, that said Kearns Keith Mining Company and said Treweek and said Burch, ever were, at any time whatever, tenants in common, the one with the other, in or to any part or portion of said 135.5 foot strip, or in or to any of the ores or ore bodies therein contained, and this defendant denies, as it has hereinbefore denied, that said Kearns Keith Mining Company, ever at any time whatever, purchased said Custer No. 2 or said Silver Hill No. 4 lode mining claims, and admits that neither this defendant, nor any of its grantors, held or claimed any right or interest in or to any part or portion of said 135.5 foot strip until the purchase and conveyance to this defendant of the same, as part and parcel of said Custer No. 2 and Silver Hill No. 4 lode mining claims, as hereinbefore alleged; but this defendant denies that this defendant and its grantors and predecessors in interest did not have any right title or ownership in or to the lodes or veins in said Conkling lode mining claim, as hereinbefore in this answer described, and in and to the ores and veins in said 135.5 foot strip aforesaid, part and parcel of said Custer No. 2 and said Silver Hill No. 4 lode mining claims; and on the contrary this de-

defendant alleges that it and its predecessors in interest, at all times alleged and claimed that it and its predecessors in interest were the owners of and entitled to all the ores, or bodies, veins and lodes in and beneath the surface of the said Conkling lode mining claim and the said Arthur lode mining claim, and said 135.5 foot strip, by reasons of its and its predecessors in interest ownership of the apex of the veins or lodes in which such ore bodies are found, as hereinafter in this answer specifically set forth and alleged. And this defendant denies that either it, or any of its predecessors in interest have been, at any time whatever, or now is, a tenant in common with said plaintiff or any of its predecessors in interest of, in or to any part or portion of said 135.5 foot strip or any of the ores found or contained therein. And this defendant admits that said Kearns Keith Mining Company never made any independent claim or any claim whatever, to any part or portion of said 135.5 foot strip, or any of the ores or minerals therein contained; but this defendant denies that it and its predecessors in interest made no independent or other claim adverse to said complainant, or any of its predecessors in interest, in or to said 135.5 foot strip, or any part thereof, until the 11th day of April 1908, and on the contrary this defendant alleges that it and its predecessors in interest have at all times since procuring the title to said Custer No. 2 and Silver Hill

32 No. 4 lode mining claims, claimed and asserted title, adverse to all the world, in and to said 135.5 foot strip and to all the ores and minerals, veins and lodes therein contained. And this defendant denies that it has made any secret extension whatever of the said Alliance Tunnel, as set forth in said amended bill of complaint, or otherwise, and denies that it, or any of its grantors or predecessors in interest, carried on any work in said Alliance Tunnel, or otherwise, as tenants in common with said Complainant, or any of its predecessors in title or interest or for the discovery or development of any ore within the exterior boundaries, extended downward vertically, of said Conkling mining claim, or claimed of or from its co-tenants any payment or reimbursement whatever out of any ores developed in said Conkling mining claim, for the cost or expense incurred in said work; and this defendant denies that while carrying on any work whatever, as tenant in common with said complainant, or any of its predecessors in interest, or while claiming to be carrying on any work whatever for the development of any properties held or claimed in common by them, or either of them, or while claiming any reimbursement whatever, by reason of such co-tenancy, or otherwise, or at all, out of any ores within said Conkling mining claim, for the cost or expense of extending said tunnel, or otherwise, said defendant's grantor, Kearns Keith Mining Company, or any other person or corporation whatever, secretly or at all discovered any ore body whatever within said 135.5 foot strip, or fraudulently or otherwise, contriving to deprive any of its or its predecessors in interest, co-tenants, with their just or any proportion of any value of said ore, or contriving or intending, or otherwise, to secure to this defendant's grantors, the benefit of the whole or any part thereof, the said Kearns Keith Mining Company se-

cretly, or without informing said complainant's predecessors in title of the discovery of any ores or otherwise, or at all, purchased said Custer No. 2 and [sais] Silver Hill No. 4 lode mining claims, or either of them, or thereafter, or at all, held the same secretly or otherwise, or after developing the said ground and fully ascertaining the extent of said ore bodies, or the value of the ore contained therein, or otherwise, or at all, for the first or any time made known to said complainant's predecessors in title that the said Kearns Keith Mining Company claimed adversely or otherwise, said 135.5 foot strip, or for the first time, or at all, pretended or claimed that said 135.5 foot strip was not within the boundaries or planes of said Conkling lode mining claim. And on the contrary this defendant alleges that at no time whatever did said Kearns Keith Mining Company have any estate, right, title, or interest whatever in or to said 135.5 foot strip, and that no ore whatever was found or developed in

33 said 135.5 foot strip, until long after the purchase and conveyance to this defendant by said Kearns, Trustee, of said Custer No. 2 and Silver Hill No. 4 lode mining claims, as hereinbefore alleged. And this defendant denies that said Kearns Keith Mining Company ever, at any time whatever, secured title to said Custer No. 2 or said Silver Hill No. 4 mining claims. And denies that it ever was in possession of any part or portion of the said 135.5 foot strip. And denies that said Kearns Keith Mining Company ever made any claim whatever to said 135.5 foot strip, or any part thereof, as any part or portion of said Conkling lode mining claim. And denies that said Kearns Keith Mining Company ever contrived or intended by any adverse claim or assertion whatever, to deprive said complainant or its predecessors in title, of any ores discovered in or beneath the surface of said 135.5 foot strip; and denies that any ore was discovered in said 135.5 foot strip by said Kearns Keith Mining Company, or by any other person or corporation than this defendant, as hereinbefore set forth and alleged. And this defendant denies that the claims, pretensions and assertions of this defendant that the boundaries of said Conkling lode mining claim, as the same are set forth in said amended bill of complaint, and in the patent to said Conkling lode mining claim, without reference to the field notes of the survey of said claim (which form and are a part of said patent) are not its true boundaries, and that the said 135.5 foot strip in said amended complaint mentioned, should not be included in the said Conkling lode mining claim, when located upon the ground, constituted or was the first notice that said Treweek and said Burch, or either of them, ever had that any such claim, [pretention] or assertion existed from any source whatever. And on the contrary this defendant alleges that at all times, both said complainant and said Treweek and said Burch have had full and complete notice that the said 135.5 foot strip was no part and parcel of the said Conkling lode mining claim, as the same was located upon the ground, and never at any time made any claim or contention that the said strip was any part or portion of said Conkling lode mining claim until just prior to the commencement of this suit.

Answering paragraph numbered 15 of said amended bill of com-

plaint, this defendant admits that the said Treweek and Burch did ascertain the actual facts and the whole thereof with respect to the underground works beneath the surface boundaries of the said Conkling lode mining claim, and of the location of the ore bodies within said Conkling lode mining claim, and the character and extent of the ore developed therein, and did ascertain the fact to be that no part or portion of the ores and minerals found and developed in the said 135.5 foot strip belonged to or was beneath any part or portion of the said Conkling lode mining claim, and did ascertain the fact that all of the ores and minerals contained in said 135.5 foot strip, were outside of and beyond the exterior boundaries of said Conkling lode mining claim.

Answering paragraph numbered 16 of said amended bill of complaint, this defendant denies each and every allegation therein contained.

This defendant admits that the said Custer No. 2 and Silver Hill No. 4 lode mining claims, were purchased by this defendant without the knowledge, acquiescence or consent of said Treweek or Burch, or either of them, but denies that such purchase was made for the purpose, or with the intention of defrauding said Treweek or Burch, or said complainant in any way whatever, as tenants in common with this defendant, or its grantor, the Kearns Keith Mining Company, of either said Conkling or said Arthur lode mining claim, or out of their just or proper rights in the premises, or otherwise, or in or to any part or portion of said Conkling lode mining claim, wherein any ores or minerals whatever, of any value whatever, have been found or discovered. And denies that this defendant has made any attempt whatever to describe or locate the said Conkling lode mining claim, so as to exclude said 135.5 foot strip therefrom, or has located or attempted to locate said Conkling lode mining claim otherwise than in accordance with the actual facts, and as said claim appears upon the ground from the permanent monuments, posts, ties and bearing-trees thereof. And this defendant denies that it has done, or caused to be done any act or thing, with any intention or purpose to defraud said complainant, or any of its grantors or predecessors in interest in any manner whatever, and this defendant admits that neither this defendant, nor said Kearns Keith Mining Company ever notified the said Treweek or the said Burch, or said complainant of the purchase by this defendant of said Custer No. 2 and Silver Hill No. 4 lode mining claims, or permitted them or either of them, to participate in such purchase; and denies that either this defendant or any of its grantors or predecessors in interest is under any obligation or duty whatever to notify either the said Burch or said Treweek or said complainant, of any sale or purchase whatever of said Custer No. 2 or said Silver Hill No. 4 lode mining claims. That as to whether since the purchase of said Custer No. 2 and said Silver Hill No. 4 lode mining claims by this defendant, as hereinbefore alleged, said complainant, since its incorporation, has been, or prior thereto said Treweek or Burch were, or said complainant now is, ready, able or willing to pay or contribute $\frac{3}{4}$ of the purchase — paid

by this defendant for said aforesaid mining claims, this defendant has no knowledge or information thereof, and leaves said complainant to make such proof thereof, as it may be advised.

This defendant denies that by reason of the purchase by this defendant of said Custer No. 2 and Silver Hill No. 4 lode mining claims, said complainant has been, or now is, or either or any of its grantors have been, greatly or wrongfully or at all, prejudiced in any way whatever, as tenants in common of said Conkling lode mining claim, as hereinbefore described, or otherwise, or at all.

Answering paragraph numbered 18 of said amended bill of complaint this defendant admits that the survey of the Conkling lode mining claim was made in the month of November of the year 1889 by Adolph Jessen, now deceased, then Deputy United States Mineral Surveyor, but that as to whether all other persons connected with the making of said survey of said Conkling lode mining claim, are dead, or their whereabouts unknown, this defendant has no knowledge or information thereof, and therefore leaves said complainant to make such proof thereof as it may be advised.

This defendant admits that said Conkling lode mining claim is situated in a rough country, at a high altitude, and that the surface is covered partly by large trees and brush and undergrowth, and that the yearly snowfall in the winter thereat is great, but this defendant denies that none of the original marks or boundaries of said Conkling lode mining claim, referred to in said patent, is now standing, and denies that the original place where the respective corners were marked, is now a matter of speculation merely; and to the contrary thereof, this defendant alleges that some of the original posts and monuments, marking the boundaries of said Conkling lode mining claim, are now standing in place in their original position, and that they are the permanent objects referred to in the field notes of said survey of said Conkling mining claim, with the proper markings thereon, now standing in their original position, and that certain bearing-trees, identifying and locating the position of the original monuments of said claim, are now standing, properly marked, and have been ever since the said survey was made, as aforesaid, and that the original position upon the ground of said Conkling lode mining claim can be definitely and accurately determined from the permanent objects, monuments, bearing-

36 trees and other references found in the field notes of the survey of said claim and upon the ground where said premises are located; and this defendant denies that it, or any of its predecessors in interest, by any means whatever, have been secretly, or at all, scheming or designing, by any ways and means whatever, or by any methods whatever, except as hereinbefore in this answer set forth and alleged, to secure to this defendant exclusively, or at all, the said 135.5 foot strip of ground hereinbefore mentioned and referred to, and that the only means or method used by this defendant or any of its predecessors in interest or title, to secure said 135.5 foot strip was by the purchase by it from said Belmont Mining Company of the said 135.5 foot strip, part and parcel of said Custer No. 2 and Silver Hill No. 4 lode mining claims, conveyed to it by said Thomas

Kearns, Trustee, as aforesaid; and this defendant denies that any part or portion of said 135.5 foot strip belongs to or is part or parcel of said Conkling lode mining claim, as described in said patent, or otherwise. And this defendant admits as it has heretofore admitted, that it purchased the said Custer No. 2 and Silver Hill No. 4 lode mining claims, embracing said 135.5 foot strip, without informing said complainant, or any of its predecessors in interest; and this defendant denies as it has heretofore denied, that either said complainant or any of its predecessors in interest, have been at any time whatever the tenant in common with this defendant, or any of its predecessors in interest, of, in or to any part or portion of said 135.5 foot strip, or any of the ores or minerals, lode or veins therein contained. And this defendant denies that by reason of any act or thing done or omitted by this defendant, or any of its predecessors in interest, said complainant, or any of its predecessors in interest, at this late date, or any other date, have been left entirely or at all helpless to meet the contentions now made by said defendant in reference to the boundaries of the said Conkling lode mining claim; and on the contrary this defendant alleges that said complainant and its predecessors in interest have at all times been fully able to ascertain and determine the true and correct boundaries of said Conkling lode mining claim, as the same exists upon the ground and that if said complainant, or any of its predecessors had gone upon the ground, it or they, at any time since the survey of said Conkling lode mining claim, in the year 1889, as aforesaid, could and would have ascertained and determined that the correct location of said Conkling lode mining claim, as the same exists upon the ground, is as said claim is described in this answer, and not otherwise. And this defendant denies that it was or is its duty, as tenants in common with said complainant, or its predecessors in interest, or otherwise, to secure the entire area described in the patent for said Conkling lode mining claim, without reference to the field notes and actual facts as they exist upon the ground; and denies that it was or is the duty of said defendant or any of its predecessors in interest not to acquire, or attempt to acquire, any interest in and to any ground or premises not embraced within the said Conkling lode mining claim, as the same exists upon the ground, or not to acquire, or attempt to acquire, any interest in or to any ground which might or could be embraced within the alleged described boundaries of the Conkling lode mining claim, as set forth in the amended complaint herein; and on the contrary this defendant alleges that it was its duty and that of its predecessors in interest to attempt to ascertain and to ascertain the true and actual boundaries of said Conkling lode mining claim, as the same were and are located upon the ground; and alleges in that behalf that it has performed its full duty and has ascertained and determined that the said Conkling lode mining claim, as the same exists upon the ground, is as set forth and described in this answer, and not otherwise. And this defendant admits that neither the Government of the United States, nor any third parties, or any person or party whomsoever, except the complainant and its pre-

decessors in interest, does now dispute or contest, or ever has disputed or contested the said Conkling lode mining claim, as patented and as the same is described in this answer. And this defendant alleges that the field notes of the survey of the said Conkling lode mining claim are part and parcel of the patent record thereof, and that the said description contained in the said patent is controlled by the field notes of the survey thereof, and by the monuments, posts, permanent objects and bearing-trees found upon the ground; and this defendant alleges that in case of any conflict between the description of the said Conkling lode mining claim, as contained in the patent thereof, and the description thereof as the same is located upon the ground by permanent monuments, objects and other permanent objects, including bearing-trees and ties to other well known mining claims, and reference in the field notes to the surveys of other mining claims in the vicinity, that the description contained in the patent must give way to such field notes, ties, permanent objects, monuments and bearing-trees.

Further answering said amended bill of complaint this defendant alleges that it is now, and continuously for more than one year last past has been the owner of, in the possession of, and entitled to the possession of certain lode mining claims, situated in the Uintah Mining District, Summit County, and State of Utah, known as and called the "Walker and Walker Extension" mining claim, patented as U. S. Lot No. 40, the "Brave Columbia" mining claim, patented as U. S.

38 Lot No. 214, the "Constitution" mining claim, patented as U. S. Lot No. 215, and the "Cumberland" mining claim, patented as U. S. Lot No. 216.

That the said Walker and Walker Extension mining claim is bounded and described as follows, to-wit:

Beginning at corner No. 1 and running thence on a true course (magnetic variation 17 deg. and 20 min. east) north 44 deg. 35 min. west 220 feet to corner No. 2, from which U. S. Mineral Monument No. 4 bears south 46 deg. 10 min. east 158 feet distant, thence south 21 deg. 15 min. west 196 feet to corner No. 3, thence south 68 deg. 5 min. west 2,804 feet to corner No. 4, thence south 44 deg. 35 min. east 216 feet to corner No. 5 thence north 68 deg. 5 min. east 2,810 feet to corner No. 6, thence north 21 deg. 15 min. east 190 feet to corner No. 1, the place of beginning.

That the said Brave Columbia mining claim, U. S. Lot No. 214 is bounded and described as follows:

Beginning at the discovery, from which U. S. Mineral Monument No. 4 bears north 68 deg. 38 min. east 1,478 feet distant, and running thence north 44 deg. 35 min. west 750 feet to a point on the westerly end line, thence along said westerly end line north 45 deg. 07 min. east 100 feet to corner No. 1, the place of beginning of this boundary, thence south 45 deg. 07 min. west 200 feet to corner No. 2, thence south 44 deg. 53 min. east 1,500 feet to corner No. 3, thence north 45 deg. 07 min. east 200 feet to corner No. 4, thence north 44

deg. 53 min. west 1,500 feet to corner No. 1, the place of beginning of boundary. All courses herein are true with magnetic variation of 17 deg. 20 min. east.

That the said Constitution Mining claim, U. S. Lot No. 215 is bounded and described as follows:

Beginning at the discovery from which U. S. Mineral Monument No. 4 bears north 68 deg. 34 min. east 1,695 feet distant, and running thence on a true course (magnetic variation 17 deg. 20 min. east) north 44 deg. 53 min. west 750 feet, thence north 45 deg. 07 min. east 100 feet to corner No. 1, thence south 45 deg. 07 min. west 200 feet to corner No. 2, thence south 44 deg. 53 min. east 1,500 feet to corner No. 3, thence north 45 deg. 07 min. east 200 feet to corner No. 4; thence north 44 deg. 53 min. west 1,500 feet to said corner No. 1, the place of beginning of the boundary.

That the said Cumberland mining claim U. S. Lot No. 216, is bounded and described as follows:

Beginning at the discovery from which U. S. Mineral Monument No. 4 bears north 68 deg. 31 min. east 1,912.3 feet distant, and running thence on a true course (magnetic variation 17 deg. 20 min. east) north 44 deg. 53 min. west 750 feet, thence north 45 deg. 07 min. east 100 feet to corner No. 1, thence south 45 deg. 07 min. west 200 feet to corner No. 2, thence south 44 deg. 53 min. east 1,500 feet to corner No. 3, thence north 45 deg. 07 min. east 200 feet to corner No. 4, thence north 44 deg. 53 min. west 1,500 feet to corner No. 1, the place of beginning of the boundary.

That the said Brave Columbia, Constitution and Cumberland mining claims are contiguous, the westerly side line of the said Brave Columbia and the easterly side line of the said Constitution being coincident, and the westerly side line of the said Constitution and the easterly side line of the Cumberland being coincident.

That the said Walker and Walker Extension mining claim crosses and overlaps the said Brave Columbia, the said Constitution and the said Cumberland mining claims, and the said Walker and Walker Extension mining claim antedates the said Brave Columbia, the said Constitution and the said Cumberland, and the conflict area arising from such crossing and overlapping, as aforesaid, was, by patent of the Government of the United States, granted to the owners of the said Walker and Walker Extension mining claim.

That all of the ores mined or removed by this defendant from beneath the surface of the said Conkling mining claim lay within to-wit: 50 feet easterly of the westerly end line of said claim, and all of said ores were found within and belonged to a vein or lode of rock in place, the course or strike of which is in an easterly and westerly direction, and the top or apex of which lies wholly outside of, and northerly of, the said Conkling mining claim, and within the said mining claims of this defendant.

This defendant further alleges that said vein or lode on its course or strike, and at its apex, crosses the located easterly side line of the

said Brave Columbia mining claim, and thence on its course westerly, passes to and across the westerly side line of the said Brave Columbia, and thence on its course or strike and at its apex, traverses the said Constitution mining claim, crossing both of the located side lines thereof, and thence traverses the said Cumberland mining claim, crossing both of the located side lines thereof. That the apex of said vein, on its course or strike, for the entire distance lying between the easterly side line of the said Brave Columbia and the westerly side line of the said Cumberland mining claim, lies either a short distance, to-wit: 25 feet north of the south side line of the said

40 Walker and Walker Extension Mining claim, or a short distance, to-wit: 25 feet south of the south side line of the said Walker and Walker Extension mining claim. (And nowhere does said vein, on its course or strike and at its apex cross the [op-osite] side lines of the said Walker and Walker Extension mining claim). That said vein dips in a southerly direction and on its dip or course downward into earth, passes beyond the legal side lines, extended downward vertically, of each of said claims, so owned by this defendant and thence continuing on its dip or course downward, passes into, beneath and beyond the exterior boundaries, extended downward vertically, of the said Conkling mining claim.

And this defendant further alleges that if said vein, on its course or strike and at its apex, as it so traverses and crosses the located side lines of the said Brave Columbia, Constitution and Cumberland mining claims, as aforesaid, so lies to the north of the south side lines of the said Walker and Walker Extension, as aforesaid, and therefore within the conflict area, so as aforesaid patented to the owners of the said Walker and Walker Extension, this defendant, owner as aforesaid, of the said Walker and Walker Extension mining claim, is the owner in the possession of, and entitled to the possession of all that part of said vein, throughout its entire depth, lying between planes, one drawn through the point where said vein on its course and at its apex crosses the westerly side line of the said Brave Columbia Mining Claim, and parallel to the located end lines of the said Walker and Walker Extension, and another parallel thereto and through the point where said vein crosses, as aforesaid, the westerly located side line of the said Cumberland mining claim, and that between such planes, extended indefinitely in their own direction, lies all that part of said vein found beneath the surface of the said Conkling mining claim, as aforesaid, and from which this defendant has mined, extracted or removed any ore whatsoever. And this defendant further alleges that if said vein, on its course or strike and at its apex, as it traverses and crosses, as aforesaid, the said Brave Columbia, Constitution and Cumberland mining claim, lies to the south as aforesaid of the south side line of the said Walker and Walker Extension mining claim, this defendant, the owner as aforesaid of the said Brave Columbia, Constitution and Cumberland mining claims, is the owner, in the possession of and entitled to the possession of all that part of said vein, throughout its entire depth, which lies between planes, one drawn through the easterly side line of the said Brave

41 Columbia and the other parallel thereto and through the westerly side line of the said Cumberland, extended indefinitely in their own direction, and that all that part of said vein, so as aforesaid found beneath the surface of the said Conkling claim, and from which this defendant has mined, extracted or removed any ore whatsoever, lies and is found between said planes, so extended as aforesaid.

Wherefore this defendant humbly prays to be hence dismissed with its reasonable costs and charges in this behalf most wrongfully sustained.

(Signed)

DICKSON, ELLIS, ELLIS &
SCHULDER,
Solicitors for Defendant,
Silver King Coalition Mines Company.

W. H. DICKSON,
A. C. ELLIS,
A. C. ELLIS, Jr.,
R. G. SCHULDER,
Of Counsel.

[S. K. C. Co. Seal.]

SILVER KING COALITION
MINES COMPANY,
By F. J. WESTCOTT,
Secretary.

STATE OF UTAH,
County of Salt Lake, ss:

David Keith being first duly sworn deposes and says; that he is an officer of the defendant above named, Silver King Coalition Mines Company, to-wit: the President thereof; that he has read the above and foregoing answer and knows the contents thereof and that the same is true of his own knowledge except as to matters therein stated upon information and belief, and as to such matters he believes it to be true.

(Signed)

DAVID KEITH.

Subscribed and sworn to before me this 3rd day of August, 1909.
[SEAL.] RUSSELL G. SCHULDER,
Notary Public.

My commission expires June 25, 1912.

Copy of the above answer received and due service admitted this 3 day of August 1909.

CHARLES C. DEY,
A. L. HOPPAUGH,
Solicitors for Plaintiff.

Filed August 3, 1909.

JERROLD R. LETCHER,
Clerk.

Stipulation in re Certain Pleadings.

It is hereby stipulated and agreed by and between William H. King, attorney for complainant herein, and Dickson, Ellis, Ellis & Schulder, attorneys for defendant herein, that the said defendant may file in said cause, the annexed amended answer; that the reply of the complainant to the answer now on file, shall be treated and considered as the reply to said amended answer, and that the verification of said reply, as originally filed, shall be treated and considered as the verification of the reply to said amended answer.

WILLIAM H. KING,

Attorney for Complainant.

DICKSON, ELLIS, ELLIS &
SCHULDER,

Attorneys for Defendant.

Dated this — day of December, 1911.

Filed Dec. 16, 1911.

JERROLD R. LETCHER,

Clerk.

(Amended Answer to Amended Bill of Complaint.)

Comes now the defendant above named, Silver King Coalition Mines Company, and by leave of the court first had and obtained, files this its amended answer to the amended bill of complaint of complainant above named;

This defendant, now and at all times hereafter, saving to itself all and all manner of benefit of exception or otherwise that can or may be had or taken to the many errors, uncertainties and imperfections in the said amended bill contained, for answer thereto, or to so much thereof as this defendant is advised it is material or necessary for it to make answer to, answering says:

This defendant admits that on or about the 17th day of September, A. D. 1908, Nicholas Treweek and J. Leonard Burch, the original complainants herein, caused the complainant to be incorporated under the laws of the State of Utah, and did thereupon convey to said complainant corporation, all of their right, title and interest in and to the Conkling Lode Mining Claim, patented as U. S. Lot No. 689, and the Arthur Lode Mining Claim, patented as U. S. Lot No. 690, situated in the Uintah Mining District, County of Summit, State of Utah, and did also assign and transfer to said complainant corporation all manner of actions, causes of action, suits, demands, controversy and accounting of every kind and nature whatever in favor of said Treweek and Burch and against the defendant
43 herein, but as to whether or not the capital stock of said complainant corporation was paid for upon the incorporation of said company by the conveyance of said above named mining claim, or any interests therein, and by the assignment mentioned in said

[complain-], this defendant has no knowledge or information thereof, and leaves said complainant to make such proof thereof as it may be advised.

This defendant admits that it is a corporation, organized and incorporated under the laws of the State of Nevada, on or about the month of May, 1907, but denies that it was so organized for the purpose of taking over the Kearns Keith Mining Company or the Silver King Mining Company respectively, corporations.

This defendant admits that it succeeded to the interest theretofore owned by said Kearns Keith Mining Company in and to the Arthur and Conkling Lode Mining Claims, and that such interest was an undivided one-fourth interest therein.

Admits that on the 22nd day of September, 1903, the said Kearns Keith Mining Company was the owner of said undivided one-fourth interest in and to said Conkling and Arthur Lode Mining Claims and from thence continued to be the owner thereof until said Kearns Keith Mining Company conveyed and transferred said interest to the defendant above named, which said conveyance or transfer was made on, to-[with], the 31st day of May, A. D. 1907, and not on the 29th day of May, 1907.

That as to whether or not one Nicholas Treweek was the owner of an undivided one-half interest in and to each of said Conkling and Arthur Lode Mining Claims, during all or any of the times that said Kearns Keith Mining Company was the owner of an undivided one-fourth interest therein, this defendant has no knowledge or information thereof, and leaves said complainant to make such proof thereof as it may be advised; and as to whether the said Treweek, upon the transfer by said Kearns Keith Mining Company to the defendant herein was the owner of an undivided one-half interest in said mining claims and each of them and from thence continued to be the owner of such interest in common until the transfer by him to the complainant herein, this defendant has no knowledge or information thereof, and leaves said complainant to make such proof as it may be advised.

That as to whether or not the said J. Leonard Burch was the owner, on or about the 16th day of May, 1906, or ever was, at any other time, the owner of an undivided one-fourth interest in and
44 to said Conkling and Arthur Lode Mining Claims, and that from thence as such owner he became or was the tenant in common with said Kearns Keith Mining Company in said mining claims, or either of them, until the transfer by said Kearns Keith Mining Company of its interest in and to said claims to the defendant herein, and that since the time of said transfer he ever was a tenant in common with the defendant herein to said claims, or either of them, until he transferred his interest to the complainant herein, this defendant has no knowledge or information thereof, and therefore leaves said complainant to make such proof thereof as it may be advised.

This defendant admits that on or about the 23rd day of February, 1892, the United States of America, by its letters patent, granted unto the Boss Mining Company, a corporation, those certain premises

called the Conkling and Arthur Lode Mining Claims respectively, situated in the Uintah Mining District County of Summit, State of Utah, and that in said patent said Conkling Lode Mining Claim was particularly bounded and described as in the 5th paragraph of said amended bill of complaint set forth, and that in and by the terms of said patent the said Arthur Lode Mining Claim is particularly bounded and described as set forth in said 5th paragraph of said amended complaint, but this defendant alleges that the description and boundaries of said claims as set forth in said fifth paragraph of said amended bill of complaint, are not a true or correct description or either of said mining claims as the same are bounded and described and limited upon the ground by the permanent monuments, objects and bearing-trees found upon the ground, and alleges that the said Conkling Lode Mining Claim, U. S. Lot No. 689, and the Arthur Lode Mining Claim, U. S. Lot No. 690, as the same are actually found upon the ground, are particularly described and bounded as follows, to-wit:

Commencing at corner No. 2, the northeast corner of the Conkling claim, and the northwest corner of the Arthur Claim, a common corner of said Conkling and Arthur Claims, from which U. S. Mineral Monument No. 4 bears north 32 deg. 52 min. West 939.3 feet distant, thence from said corner south 61 deg. 21 min. West 1364.5 feet to corner No. 3, the northwest corner of said Conkling Claim, thence south 21 deg. 09 min. East 600 feet to corner No. 4, the southwest corner of said Conkling Claim, thence North 61 deg. 21 min. East 1364.5 feet to corner No. 1, the southeast corner of said Conkling Claim, and also corner No. 1 and the southwest corner of said Arthur Claim, and thence North 76 deg. 57 in. East 951.8 feet to corner No. 4, the southeast corner of the Arthur claim, thence North 21 deg. 09 min. West 600 feet to corner No. 3, the northeast corner of said Arthur Claim, and thence South 76 deg. 57 min. West 951 feet to said corner No. 2, the northwest corner of said Arthur Claim and the place of commencement of surface bounds. The line of division between said mining claims runs North 21 deg. and 9 min. West from said common corner No. 1 to said common corner No. 2.

This defendant admits that beneath the surface and within the exterior boundaries, extended downward vertically, of each of said mining claims, there is a lode or vein of rock in place, bearing silver, lead and other valuable minerals, which, on its course or strike, extends throughout the length of said claims; and admits that said mining claims and each of them are valuable only for the ores and minerals therein contained, but this defendant alleges that no part or portion of the top or apex of the said lode or vein of rock in place, found beneath the surface of the said mining claims, as above admitted, is found anywhere within the exterior boundaries, extended downward vertically, of said claims, or either of them, but that the top or apex of said lode or vein, and the whole thereof, is found and contained within the surface boundaries, extended downward vertically, of certain other mining claims, owned and possessed by this defendant, as hereinafter in this answer more par-

ticularly alleged and described, which said other claims lie northerly from said Conkling and said Arthur Mining Claims.

This defendant denies that ever since the incorporation of this defendant, it has been, or still is, or ever was, in the possession of the vein or lode described in the amended complaint herein, as within or beneath the boundaries of either the said Conkling or Arthur Lode Mining Claims, or all or any of the ores or minerals therein except as hereinafter alleged; and denies that it is, or has been, since the incorporation of said defendant, working or developing any vein or lode within the boundaries of said Conkling and Arthur Lode Mining Claims, extended downward vertically, or is, or ever has been, extracting any ores or minerals therefrom, except that from the vein or lode so apexing as aforesaid, in other mining claims owned by this defendant it extracted from beneath the surface of the said Conkling Lode Mining Claim not to exceed 900 tons of ore, of all grades or classes. And this defendant alleges that the value of all the ore hitherto mined by this defendant from within the surface boundaries, extended downward vertically, of the said Conkling Mining Claim, after deducting therefrom the reasonable and necessary cost and expense of mining and disposing of said ores, does not exceed the sum of \$20,047.50. And this defendant further alleges that the reasonable and necessary cost and expense

46 incurred by it in the discovery and development of all ores hitherto mined or removed by it from within the exterior boundaries, extended downward vertically, of the said Conkling Mining Claim, exceeds the sum of \$72,500. And this defendant further alleges that it has not, at any time hitherto, mined or extracted any ores whatever from within the exterior boundaries, extended downward vertically, of the said Arthur Lode Mining Claim. And this defendant denies that the said Kearns Keith Mining Company, ever, at any time, was in possession of said vein or lode, or all or any of the ores or minerals therein, within or beneath the surface of either the said Conkling or the Arthur Lode Mining Claims, and denies that it ever was working or developing the same, or extracting any ores or minerals therefrom whatever.

This defendant admits that it and said Kearns Keith Mining Company gained access to said mining claims, beneath the surface thereof, and within the exterior boundaries thereof extended downward vertically, by means of certain underground works situated upon other property, then and now owned by this defendant and its predecessors in interest; but this defendant denies that said complainant is, or that it has been, or that any of its predecessors in interest have been excluded by this defendant from access to any of the workings of this defendant, on or beneath the surface of either the said Conkling or the said Arthur Mining Claims. And this defendant denies that it has, since its incorporation, or that said Kearns Keith Mining Company, grantor of said defendant, has extracted large or any quantities of ore from said Conkling or said Arthur Lode Mining Claims, except as hereinbefore admitted; and denies that the ores so extracted by said defendant from beneath the surface of said Conkling Mining Claim, as hereinbefore admitted,

exceed the sum of one million dollars, or any other sum whatever, except \$20,047.50; and this defendant alleges, as it has hereinbefore alleged, that the reasonable and necessary cost and expense incurred by it in the discovery and development of all said ores, so heretofore mined by it from within the exterior boundaries extending downward vertically, of the said Conkling Claim, exceeds the sum of \$72,500. And this defendant denies that the grantors of said complainant, prior to the commencement of this action, did demand from said defendant, that it account to them, as tenants in common, with it of said mining claims, of the ores and minerals by it and its grantors removed from said premises and disposed of, or for their just and proper share or value thereof; but admits that said complainant and its predecessors did demand that said defendant account to them for ores and minerals taken and removed by said

defendant from property and premises in which neither
47 said complainant nor any of its predecessors in interest ever, at any time, had any estate, right, title or interest whatever.

And this defendant admits that after the incorporation of said complainant and after it succeeded to the rights and interests of said Nicholas Treweek and J. Leonard Burch in and to the said Conkling and Arthur Mining Claims, it did, on or about the 30th day of November, 1907, demand an accounting by this defendant for the value of the ores mined by it from beneath the surface of the said Conkling Mining Claim.

Admits that said defendant company has entirely ignored said demand and refused and neglected to make answer thereto, and refused to account to said complainant for the value of the ores by it mined or removed from beneath the surface of said Conkling Lode Mining Claim, and this defendant alleges that it was not, at said time, and never has been, obligated to account to said complainant, or any of its predecessors in interest for any ores mined or extracted by it from beneath the surface of the said Conkling Lode Mining Claim, or any other mining claim then owned, held or possessed by said complainant, or any of its predecessors, in interest.

This defendant admits that it asserts, pretends and claims an exclusive interest, not as tenant in common with the complainant herein, in and to the southwest 135.5 feet of the premises attempted to be described in said amended complaint as a part and portion of the said Conkling Lode Mining Claim, adverse to said complainant, and admits that it claims and asserts that it has the exclusive right and ownership of all the ores contained therein, within planes extended downwardly vertically from the lines described in the tenth paragraph of said amended bill of complaint, and admits that said defendant has given out in speech and otherwise that it has the exclusive right to enter in and upon said premises and remove therefrom, without accounting to said [complain-t] as a tenant in common with it, as aforesaid, or otherwise, because of its ownership of the said premises in which said ores and minerals are contained: and admits that it asserts that the boundaries of the said Conkling Mining Claim, as described in said amended complaint herein, are not the proper boundaries thereof, to the extent of including the

said 135.5 feet, alleged by said complainant to be embraced within the boundaries of said Conkling Mining Claims; but this defendant denies that any part or portion of said 135.5 feet, so owned by this defendant as aforesaid, belongs to or is embraced within the said

48 Conkling Lode Mining Claim, and denies that the Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, mentioned in said tenth paragraph of said complaint, so far as said 135.5 feet are concerned, overlap or conflict at all with said Conkling Lode Mining Claim, and this defendant denies that its claims and pretensions as to ownership of said 135.5 feet are false or untrue or unfounded in fact; and denies that by reason of any of the facts alleged in said amended bill of complaint, said defendant ought not to be permitted to vary the location or boundaries of the said Conkling Lode Mining Claim upon the ground, as the same are described in said amended bill of complaint, or to assert an interest adverse to said complainant in and to said 135.5 feet; and denies that said defendant should be held as trustee of the title of any part or portion of said Custer No. 2 or the Silver Hill No. 4 Lode Mining Claims, for the benefit of said complainant, as a tenant in common with said defendant, or otherwise, or at all.

This defendant denies that the description of the location of said Conkling Mining Claim, as described in said amended bill, is the same or identical description, as described in the patent and as patented, and on the contrary this defendant alleges that the true description of said Conkling Lode Mining Claim, is as appears from the patent and the field notes, which are a part thereof, and the return of the surveyor making the said survey of the said Conkling Lode Mining Claim; that a true and correct description of said Conkling Lode Mining Claim is as hereinbefore in this answer set forth; and this defendant denies that in and by the description contained in said amended bill of complaint, the location of the boundaries of said Conkling Lode Mining Claim can be readily or at all traced, ascertained or determined upon the ground, and denies that said or any alleged tracing, from the description set forth in said amended complaint of said Conkling Lode Mining Claim, at all or any of the times mentioned in said amended bill of complaint, was well or at all known to said Kearns Keith Mining Company, or to this defendant, or to any other person or persons whomsoever, and this defendant admits that ever since said Conkling Mining Claim was patented, the owners of said claim have never had any disputes or contention over, or disturbance of their ownership or right of possession of said Conkling Lode Mining Claim, as the same is located upon the ground; but denies that the said Conkling Lode Mining Claim is or can be located upon the ground as the same is described in said amended complaint herein, and alleges that said Conkling Lode Mining Claim, as the same exists upon the ground, as determined by the monuments, permanent objects and bearing-trees called for in the field notes of the

49 survey of said claim, embraces the premises and none others, as the same are described hereinbefore in this answer, and do not include any part or portion of said 135.5 feet, claimed

by the complainant herein, and that the said premises as described herein, exclusive of said 135.5 feet, are the premises had and held by this defendant and its predecessors in interest and the other owners of said claim, as tenants in common with this defendant and its predecessors in interest, without dispute or contention, and that no contention as to the locus of said Conkling Lode Mining Claim was ever at any time made or communicated to this defendant, or any of its predecessors in interest, until the filing of the complaint in this action and the alleged description thereof, as set forth in this complaint, and denies that this defendant has been guilty of any wrongful acts or conduct whatever, or that its grantor and predecessor in interest, Kearns Keith Mining Company, has been guilty of any wrongful act or conduct whatever. And this defendant denies that it or its predecessor in interest, the Kearns Keith Mining Company, or any other person whomsoever, at any time whatever, either before or after the 22nd day of September, 1903, extended secretly the Alliance Tunnel, or any other workings through or underneath the Conkling Lode Mining Claim, as alleged in said complaint or otherwise, or that they, or either of them, secretly drove any cross-cut or other working from said Alliance Tunnel, or otherwise, to or near the southwest corner of said Conkling Lode Mining Claim, as the same is described in said patent, or in said amended complaint.

This defendant admits that the openings underneath the surface and within the boundary planes of the Conkling Lode Mining Claim, extended downward vertically, can be entered through the main shaft of the Silver King Mining Company, and from the levels and drifts therefrom, or through said Alliance Tunnel, and that said shaft, drifts, levels and said Alliance Tunnel are under the exclusive control and ownership of the defendant, and were under the exclusive ownership and control of the said Silver King Mining Company, with the reserved right in said Thomas Kearns, as alleged in said amended complaint, until the incorporation of the Kearns Keith Mining Company. And this defendant denies that in drifting and extending the cross-cut from said Alliance Tunnel, and prior to the conveyance by said Kearns Keith Mining Company, the said Kearns Keith Mining Company secretly discovered or explored a large or any valuable ore deposit. And denies that this defendant, or its

50 said grantor, have made extensive or any stoping, or secretly removed from any part or portion of said Conkling Lode Mining Claim ore of the value of [\$1,000.00], or any other sum, except the sum of \$20,047.50, as hereinbefore in this answer alleged. And this defendant denies that the description of the said Conkling Lode Mining Claim, as asserted and claimed by this defendant herein, is such that it is within the boundary planes of the said Conkling Lode Mining Claim, as alleged to be described in the patent thereof, extended downward vertically, and denies that the 135.5 feet, claimed by said complainant in said amended bill of complaint to be part and parcel, of said Conkling Lode Mining Claim in any part or portion thereof, or belongs thereto, or that said complainant, or any of its predecessors in interest, have any [estate], right title or interest in

or to any part or portion of said 135.5 feet, or in or to any part or portion of the ores or minerals therein contained, vertically beneath the surface thereof. And this defendant denies that the value of the ores found or discovered within the planes extended downward vertically of said 135.5 foot strip is not less than the sum of \$2,500,000 or of any greater value than the sum of \$52,681.00. And this defendant denies that all or any of the underground work or discovery of ore, or removal of ore, by it, was intentionally or wrongfully or at all kept secret by this defendant, or its predecessors in interest from said complainant, or any of its predecessors in interest, Nicholas Treweek or J. Leonard Burch, or any other person. And this defendant alleges that as to what suspicions the predecessors in interest of said complainant had, this defendant has no knowledge or information thereof, and leaves said complainant to make proof as it may be advised. And this defendant denies that it refused permission to said predecessors in interest of said complainant to inspect the underground workings beneath the surface of the said Conkling and Arthur Mining Claim, and this defendant admits that on or about the month of December, 1907, the said Nicholas Treweek and J. Leonard Burch demanded of this defendant an accounting for the proceeds of any or all ores taken from said Conkling and Arthur Lode Mining Claims, but this defendant denies that this defendant expressed great or any surprise at any demand which said Treweek or said Burch might make upon it for ores mined by it from its property, and admits that it informed the said Treweek and Burch that it had spent a great deal of money in exploration and claimed the right to remove and extract sufficient ore to repay it for the money expended in such explorations before said Nicholas Treweek and said J. Leonard Burch, or either of them, would be entitled to have or receive, as tenants in common with said defendant, any accounting whatever from said defendant.

51 This defendant denies that the said Kearns Keith Mining Company at any time after the discovery of ore, as alleged in the thirteenth paragraph of said amended bill of complaint, or otherwise, or at all, made or caused to be made cunning or any efforts to purchase the interest in said mining claims, owned by said Treweek and said Burch, or either of them, or that said Kearns Keith Mining Company, or anyone on its behalf, represented that said interests were of no special value, or that they offered to pay for said interests the sum of \$15,000 and no more; but this defendant alleges that it is a fact that the interest of said Treweek and said Burch at said time, and of said complainant, in and to said Conkling and Arthur Lode Mining Claims, was at said time, and is now of no great value, for the reason that there has been discovered in and beneath the surface of said mining claims no ores of any especial or great value, and that the ores which have been discovered therein belong to and are part and parcel of a vein or lode having its apex in mining ground and premises owned, held and possessed by this defendant, since its incorporation, and prior thereto, by its predecessors in interest, as hereinafter [particularly] set forth and alleged, and as to when the [said] Treweek and the said Burch first had any suspicion, as al-

leged in the 13th paragraph of said complaint, this defendant has no knowledge or information, and therefore leaves the said complainant to make such proof thereof as it may be advised.

This defendant, answering paragraph numbered 14 of said amended bill of complaint, denies that after any failure whatever, at any time whatever, to purchase any interest of said Treweek and Burch, or either of them, in said Conkling and Arthur Lode Mining Claims, as alleged in said amended bill of complaint, or otherwise, or at all, the said Kearns Keith Mining Company, did, during the month of April, 1907, or at any other time, or at all, purchase from the Belmont Mining Company, a corporation, for the consideration named in said amended complaint, or any other consideration whatever, the Custer No. 2 and the Silver Hill No. 4 Lode Mining Claims, or either of them, then owned by said Belmont Mining Company, or took a conveyance for the same, or either of them, in the name of Thomas Kearns, trustee, or any other person whomsoever, and denies that upon the incorporation of this defendant, the said Thomas Kearns, as trustee, wrongfully conveyed the said mining claims, or either of them, exclusively to the defendant herein, and to the contrary this defendant alleges that on or about, to-wit: the 6th day of April, 1907, the said Thomas Kearns, individually, and for and on his own behalf, took and received an assignment of an option theretofore given and granted by the Belmont Mining Company to one

52 D. P. Rohlfing, to purchase the said Custer No. 2 and the said Silver Hill No. 4 Lode Mining Claims; that thereafter and on or about the 10th day of April, 1907, the said Thomas Kearns did offer to the Silver King Mining Company, a corporation, to assign and transfer to it the said option to purchase, so as aforesaid assigned to him, and on, to-wit: the said 10th day of April, 1907, the said Silver King Mining Company did duly accept the offer of the said Thomas Kearns, and did thereupon pay to the said Belmont Mining Company, the portion of the consideration to be paid to it, pursuant to the terms of said option, and did thereupon direct that the deed from said Belmont Mining Company should be taken in the name of said Thomas Kearns, as trustee for said Silver King Mining Company, to be conveyed by him to the nominee of said Silver King Mining Company; that on to-wit: the 12th day of April, 1907, the said Belmont Mining Company did execute a deed of conveyance to said Custer No. 2 and Silver Hill No. 4 Lode Mining Claim, conveying the said claims and each of them unto the said Thomas Kearns, trustee, and that thereafter and upon the incorporation and organization of this defendant, and on, to-wit: the — day of June, 1907, at the request and pursuant to the agreement entered into by and between the said Thomas Kearns and the said Silver King Mining Company, the said Thomas Kearns did convey the said Custer No. 2 and the said Silver Hill No. 4 Lode Mining Claims to this defendant, and that on said day this defendant did complete the purchase of said mining claims and each of them, by paying the balance of the purchase price then due thereon to the said Belmont Mining Company; that at no time whatever did said Kearns Keith Mining Company acquire, have, hold or possess any estate, right, title or interest, of,

in or to the said Custer No. 2 and the said Silver Hill No. 4 Lode Mining Claims, or either of them, or in or to any part or portion of either of them; that no part of the purchase price of said mining claims, or either of them, was paid or discharged by said Kearns Keith Mining Company, or any one on its behalf, but that the title to said mining claims was purchased and paid for by said Silver King Mining Company and this defendant, as aforesaid, for the sole use and benefit of said Silver King Mining Company and this defendant, and not otherwise; and this defendant admits that the said Custer No. 2 and said Silver Hill No. 4 Lode Mining Claims were by letters patent of the United States, dated June 2nd, 1904, granted to the Belmont Mining Company, and admits that said patent was based upon location notices antedating the location of said Conkling Lode Mining Claim; and this defendant denies that the said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims overlap or include any part or portion of

53 the area of the said Conkling Lode Mining Claim, included within the said 135.5 foot strip thereof, as set forth and described in said amended complaint, and wrongfully claimed by said complaint to be part and parcel of the said Conkling Lode Mining Claim; and denies that any part or portion of said 135.5 foot strip is embraced within or described or forms any part or portion of the said Conkling Lode Mining Claim.

This defendant denies that at all or any of the times mentioned in said amended bill of complaint, or while the said Treweek and Burch and the said Kearns Keith Mining Company were tenants in common in said Arthur and Conkling Lode Mining Claims, that either the said Kearns Keith Mining Company, or the said Treweek or Burch were as tenants in common, as alleged in said amended bill of complaint, or otherwise, or at all, in the actual, constructive or any possession whatever of any part or portion of the said 135.5 foot strip of the said Conkling Lode Mining Claim, as set forth and alleged in said amended bill of complaint, or otherwise; and denies that the purchase by the said Thomas Kearns and this defendant and said Silver King Mining Company, as hereinbefore alleged, of said Custer No. 2 and said Silver Hill No. 4 Lode Mining Claims, or either of them, from said Belmont Mining Company, was at all made while said Kearns Keith Mining Company, or said Treweek or said Burch, as tenants in common of said Arthur and Conkling Lode Mining Claims, or either of them, were in the possession of any part or portion of the said 135.5 foot strip, mentioned in said amended complaint, or otherwise, and denies as it has heretofore denied, that said Kearns Keith Mining Company and said Treweek and said Burch were tenants in common of any part or portion of said 135.5 foot strip, or that any part or portion of said 135.5 foot strip ever was, at any time, part or parcel of the said Conkling Lode Mining Claim; and this defendant denies that at the time of the purchase by said Thomas Kearns, trustee, of said Custer No. 2 and said Silver Hill No. 4 Lode Mining Claims, that any ore bodies whatever had been found or discovered within any part or portion of said 135.5 foot strip, and alleges that no ore was developed or found within said 135.5 foot strip until long after the purchase of said Custer No. 2

and Silver Hill No. 4 Lode Mining Claims, and the conveyance thereof to this defendant, as hereinbefore alleged, and denies, as it has hereinbefore denied, that said Kearns Keith Mining Company and said Treweek and said Burch ever were, at any time whatever, tenants in common, the one with the other, in or to any part or portion of said 135.5 foot strip, or in or to any of the ores or ore bodies therein contained, and this defendant denies, as it has hereinbefore denied, that said Kearns Keith Mining Company, ever, at any

54 time whatever, purchased said Custer No. 2 or said Silver Hill No. 4 Lode Mining [claim-], and admits that neither this defendant, nor any of its grantors, held or claimed any right or interest in or to any part or portion of said 135.5 foot strip until the purchase and conveyance to this defendant of the same, as part and parcel of said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, as hereinbefore alleged; but this defendant denies that this defendant and its grantors and predecessors in interest did not have any right, title or ownership in or to the lodes or veins in said Conkling Lode Mining Claims, as hereinbefore in this answer described, and in and to the ores and [veins] in said 135.5 foot strip aforesaid, part and parcel of said Custer No. 2 and said Silver Hill No. 4 Lode Mining [Claim-]; and on the contrary this defendant alleges that it and its predecessors in interest, at all times alleged and claimed that it and its predecessors in interest were the owners of and entitled to all the ore bodies, veins and lodes in and beneath the surface of the said Conkling Lode Mining Claim and the said Arthur Lode Mining Claim and said 135.5 foot strip, by reason of its and its predecessors in interest, ownership of the apex of the veins or lodes in which such ore bodies are found, as hereinafter in this answer specifically set forth and alleged. And this defendant denies that either it, or any [or] its predecessors in interest, have been, at any time whatever, or now is, a tenant in common with said plaintiff or any of its predecessors in interest of, in or to any part or portion of said 135.5 foot strip, or any of the ores found or contained therein. And this defendant admits that said Kearns Keith Mining Company never made any independent claim, or any claim whatever, to any part or portion of said 135.5 foot strip, or any of the ores or minerals therein contained; but this defendant denies that it and its predecessors in interest made no independent or other claim adverse to said complainant, or any of its predecessors in interest, in or to said 135.5 foot strip, or any part thereof, until the 11th day of April, 1908, and on the contrary this defendant alleges that it and its predecessors in interest have at all times since procuring the title to said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, as aforesaid, claimed and asserted title, adverse to all the world, in and to said 135.5 foot strip and to all the ores and minerals, veins and lodes therein contained. And this defendant denies that it has made any secret extension whatever of the said Alliance Tunnel, as set forth in said amended bill of complaint, or otherwise, and denies that it, or any of its grantors or predecessors in interest, carried on any work in said Alliance Tunnel, or otherwise, as tenants in common with said complainant, or any of its predecessors in title or interest, or for the

55 discovery or development of any ore within the exterior

boundaries, extended downward vertically, of said Conkling Mining Claim, or claimed of or from its co-tenants any payment for reimbursement whatever out of any ores developed in said Conkling Mining Claim, for the cost or expense incurred in said work; and this defendant denies that while carrying on any work whatever, as tenant in common with said complainant, or any of its predecessors in interest, or while claiming to be carrying on any work whatever for the development of any properties held or claimed in common by them, or either of them, or while claiming any reimbursement whatever by reason of such co-tenancy, or otherwise, or at all, out of any ores within said Conkling Mining Claim, for the cost or expense of extending said tunnel, or otherwise, said defendant's grantor, Kearns Keith Mining Company, or any other person or corporation whatever, secretly or at all discovered any ore body whatever within said 135.5 foot strip, or fraudulently or otherwise, contriving to deprive any of its co-tenants of their just or any proportion of the value of any ore, or contriving or intending to secure to this defendant's grantors, the benefit of the whole or any part thereof, the said Kearns Keith Mining Company secretly, without informing said complainant's predecessors in title of the discovery of any ores, or otherwise, or at all, purchased said Custer No. 2 or said Silver Hill No. 4 Lode Mining Claims, or either of them, or thereafter, or at all, held the same secretly or otherwise, or after developing the said ground and fully ascertaining the extent of said ore bodies, or the value of the ore contained therein, or otherwise, or at all, for the first or any time made known to said complainant's predecessors in title that the said Kearns Keith Mining Company claimed adversely or otherwise, said 135.5 foot strip, or for the first time, or at all, pretended or claimed that said 135.5 foot strip was not within the boundaries or planes of said Conkling Lode Mining Claim. And on the contrary this defendant alleges that at no time whatever did, said Kearns Keith Mining Company have any estate, right, title or interest whatever in or to said 135.5 foot strip, and that no ore whatever was found or developed in said 135.5 foot strip, until long after the purchase and conveyance to this defendant by said Kearns, trustee, of said Custer No. 2 and Silver Hill No. 4 Lode Mining [Claim-], as hereinbefore alleged. And this defendant denies that said Kearns Keith Mining Company ever, at any time whatever, secured title to said Custer No. 2 or said Silver Hill No. 4 Mining Claims. And denies that it ever was in possession of any part or portion of the said 135.5 foot strip. And denies that said Kearns Keith Mining Company ever made any claim whatever to said 135.5 foot strip, or any part thereof, as any part [of] portion of said Conkling Lode Mining Claim. And denies that said Kearns Keith Mining Company ever contrived or intended by any adverse claim or assertion whatever, to deprive said complainant, or its predecessors in title, of any ores discovered in or beneath the surface of said 135.5 foot strip; and denies that any ore was discovered in said 135.5 foot strip by said Kearns Keith Mining Company, or by any other person or corporation than this defendant, as hereinbefore set forth and alleged. And this defendant denies that the claims and assertions of this defendant

that the boundaries of said Conkling Lode Mining Claim, as the same are set forth in said amended bill of complaint, and in the patent to said Conkling Lode Mining Claim, without reference to the field notes of the survey of said claim (which form and are a part of said patent) are not its true boundaries, and that the said 135.5 foot strip in said amended complaint mentioned, should not be included in the said Conkling Lode Mining Claim, when located upon the ground, constituted or was the first notice that said Treweek and said Burch, or either of them, ever had that any such claim or assertion existed from any source whatever. And on the contrary this defendant alleges that at all times, both said complainant and said Treweek and said Burch have had full and complete notice that the said 135.5 foot strip was no part or parcel of the said Conkling Lode Mining Claim, as the same was located upon the ground, and never at any time made any claim or contention that the said strip was any part or portion of said Conkling Lode Mining Claim until just prior to the commencement of this suit.

Answering paragraph numbered 15 of said amended bill of complaint, this defendant admits that the said Treweek and Burch did ascertain the actual facts and the whole thereof with respect to the underground works beneath the surface boundaries of the said Conkling Lode Mining Claim, and the character and extent of the ore developed therein, and did ascertain the fact to be that no part [of] portion of the ores and minerals found and developed in the said 135.5 foot strip belonged to or was beneath any part or portion of the said Conkling Lode Mining Claim; and did ascertain the fact that all of the ores and minerals contained in said 135.5 foot strip, were outside of and beyond the exterior boundaries of said Conkling Lode Mining Claim.

Answering paragraph numbered 16 of said amended bill of complaint, this defendant denies each and every allegation [thereon] contained.

57 This defendant admits that the said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims were purchased by this defendant without the knowledge, acquiescence or consent of said Treweek or Burch, or either of them, but denies that such purchase was made for the purpose, or with the intention of defrauding said Treweek or Burch, or said complainant in any way whatever, as tenants in common with this defendant, or its grantor, the Kearns Keith Mining Company, or either said Conkling or said Arthur Lode Mining Claims, or out of their just or proper rights in the premises, or otherwise, or in or to any part or portion of said Conkling Lode Mining Claim, wherein any ores or minerals whatever, of any value whatever, have been found or discovered. And denies that this defendant has made any attempt whatever to describe or locate the said Conkling Lode Mining Claim, so as to exclude said 135.5 foot strip therefrom, or has located or attempted to locate said Conkling Lode Mining Claim otherwise than in accordance with the actual facts, and as said claim appears upon the ground, from the permanent monuments, posts, ties and bearing-trees thereof, And this defendant denies that it has done, or

caused to be done any act or thing, with any intention or purpose to defraud said complainant or any of its grantors or predecessors in interest, in any manner whatever, and this defendant admits that neither this defendant, nor said Kearns Keith Mining Company ever notified the said Treweek or the said Burch, or said complainant of the purchase by this defendant of said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, or permitted them, or either of them, to participate in such purchase; and denies that either this defendant or any of its grantors or predecessors in interest was under any obligation or duty whatever to notify either the said Burch or said Treweek or said complainant of any sale or purchase whatever of said Custer No. 2 or said Silver Hill No. 4 Lode Mining Claims. That as to whether since the purchase of said Custer No. 2 and said Silver Hill No. 4 Lode Mining Claims by this defendant, as hereinbefore alleged, said complainant, since its incorporation, has been, or prior thereto said Treweek or Burch were, or said complainant now is, ready, able or willing to pay or contribute $\frac{3}{4}$ of the purchase paid by this defendant for said aforesaid mining claims, this defendant has no knowledge or information thereof, and leaves said complainant to make such proof thereof as it may be advised.

This defendant denies that by reason of the purchase by this defendant of said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, said complainant has been, or now is, or either or any of its grantors have been, greatly or wrongfully or at all, prejudiced in any way whatever, as tenants in common of said Conkling Lode Mining Claim, as hereinbefore described, or otherwise, or at all.

58 Answering paragraph numbered 18 of said amended bill of complaint, this defendant admits that the survey of the Conkling Lode Mining Claim was made in the month of November [of the] 1889 by Adolph Jessen, now deceased, then Deputy United States Mineral Surveyor, but that as to whether all other persons connected with the making of said survey of said Conkling Lode Mining Claim, are dead, or their whereabouts unknown, this defendant has no knowledge or information thereof, and therefore leaves said complainant to make such proof thereof as it may be advised.

This defendant admits that said Conkling Lode Mining Claim is situated in a rough country, at a high altitude, and that the surface is covered partly by large trees and brush and undergrowth, and that the yearly snow fall in the winter thereat is great, but this defendant denies that none of the original marks or boundaries of said Conkling Lode Mining Claim, referred to in said patent, is now standing, and denies that the original place where the respective corners were marked, is now a matter of speculation merely; and to the contrary thereof this defendant alleges that some of the original posts and monuments, marking the boundaries of said Conkling Lode Mining Claim, are now standing in place in their original position, and that they are the permanent objects referred to in the field notes of said survey of said Conkling Mining Claim, with the proper markings thereon, now standing in their original

position, and that certain bearing-trees, identifying and locating the position of the original monuments, of said claim, are now standing, properly marked, and have been ever since the said survey was made, as aforesaid, and that the original position upon the ground of said Conkling Lode Mining Claim can be definitely and accurately determined from the permanent objects, monuments, bearing-trees and other references found in the field notes of the survey of said claim and upon the ground where said premises are located; and this defendant denies that it, or any of its predecessors in interest, by any means whatever, have been secretly, or at all, scheming or designing, by any ways or means whatever, or by any methods whatever, except as hereinbefore in this answer set forth and alleged, to secure to this defendant exclusively, or at all, the said 135.5 foot strip of ground hereinbefore mentioned and referred to, and that the only means or method used by this defendant, or any of its predecessors in interest or title, to secure said 135.5 foot strip, was by the purchase by it from said Belmont Mining Company of the said 135.5 foot strip, part and parcel of said Custer

No. 2 and Silver Hill No. 4 Lode Mining Claims, conveyed to it by said Thomas Kearns, trustee, as aforesaid; and this

defendant denies that any part or portion of said 135.5 foot strip belongs to, or is part or parcel of, said Conkling Lode Mining Claim, as described in said patent, or otherwise. And this defendant admits, as it has heretofore admitted, that it purchased the said Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, embracing said 135.5 foot strip, without informing said complainant or any of its predecessors in interest; and this defendant denies, as it has heretofore denied, that either said complainant, or any of its predecessors in interest have been at any time whatever the tenant in common with this defendant, or any of its predecessors in interest, of, in or to any part or portion of said 135.5 foot strip, or any of the ores or minerals, lodes or veins therein contained. And this defendant denies that by reason of any act or thing done or omitted by this defendant, or any of its predecessors in interest, said complainant, or any of its predecessors in interest, at this late date, or any other date, have been left entirely or at all helpless to meet the contentions now made by said defendant in reference to the boundaries of the said Conkling Lode Mining Claim; and on the contrary this defendant alleges that said complainant and its predecessors in interest have at all times been fully able to ascertain and determine the true and correct boundaries of said Conkling Lode Mining Claim, as the same exists upon the ground and that if said complainant, or any of its predecessors, had gone upon the ground, it or they, at any time since the survey of said Conkling Lode Mining Claim, in the year 1880, as aforesaid, could and would have ascertained and determined that the correct location of said Conkling Lode Mining Claim, as the same exists upon the ground, is as said claim is described in this answer, and not otherwise. And this defendant denies that it was or is its duty, as tenants in common with said complainant, or its predecessors in interest, or otherwise, to secure the entire area described in the patent

for said Conkling Lode Mining Claim, without reference to the field notes and actual facts as they exist upon the ground; and denies that it was or is the duty of said defendant, or any of its predecessors in interest not to acquire, or attempt to acquire, any interest in and to any ground or premises not embraced within the said Conkling Lode Mining Claim, as the same exists upon the ground, or not to acquire, or attempt to acquire, any interest in or to any ground which might or could be embraced within the alleged described boundaries of the Conkling Lode Mining Claim, as set forth in the amended complaint herein; and on the

60 contrary this defendant alleges that it was its duty and that of its predecessors in interest to attempt to ascertain and to ascertain the true and actual boundaries of said Conkling Lode Mining Claim, as the same were and are located upon the ground; and alleges in that behalf that it has performed its full duty and has ascertained and determined that the said Conkling Lode Mining Claim, as the same exists upon the ground, is as set forth and described in this answer, and not otherwise. And this defendant admits that neither the Government of the United States, nor any third parties, or any person or party whomsoever, except the complainant, and its predecessors in interest, does now dispute or contest, or ever has disputed or contested the said Conkling Lode Mining Claim, as patented and as the same is described in this answer. And this defendant alleges that the field notes of the survey of the said Conkling Lode Mining Claim are part and parcel of the patent record thereof, and that the said description contained in the said patent is controlled by the field notes of the survey thereof, and by the monuments, posts, permanent objects and bearing-trees found upon the ground; and this defendant alleges that in case of any conflict between the description of the said Conkling Lode Mining Claim, as contained in the patent thereof, and the description thereof as the same is located upon the ground by permanent monuments, objects and other permanent objects, including bearing-trees and ties to other well known mining claims, and reference in the field notes to the surveys of other mining claims in the vicinity, that the description contained in the patent must give way to such field notes, ties, permanent objects, monuments and bearing-trees.

Further answering said bill of complaint, this defendant alleges that it is now, and continuously for more than four years and seven months last past has been, the owner of, in the possession of and entitled to the possession of certain lode mining claims, situated in the Utah Mining District, Summit County, State of Utah, known as and called the "Pinyon and Pinyon Extension" Lode Mining Claim, Lot No. 42, the "Boss" Lode Mining Claim, Lot No. 126, the "Zephyr" Lode Mining Claim, Lot No. 459, the "Brave Columbia" Lode Mining Claim, Lot No. 14, the "Constitution" Lode Mining Claim, Lot No. 215, the "Cumberland" Lode Mining Claim, Lot No. 216 and the "Mourne Doctrine," Lode Mining Claim, Lot No. 217.

That the said Pinyon and Pinyon Extension Mining Claim is bounded and described as follows, to-wit:

Beginning at Post No. 1 and running thence on a true course, magnetic variation, 17 deg. 20 min. East, North 57 deg. 29 min. West 200 feet to Post No. 2; thence South 32 deg. 23 min. West 2,809.4 feet to post No. 3; thence South 54 deg. 00 min. East 194.1 feet to Post No. 4; thence North 32 deg. 30 min. East 2,821.1 feet to Post No. 1, the place of beginning. From No. 1 United States Mineral Monument No. 4 bears south 43 deg. 04 min. West 1393.1 feet distant.

That the said Boss Lode Mining Claim is bounded and described as follows:

Beginning at Post No. 1 and running thence on a true course, magnetic variation, 17 deg. 20 min. East, North 67 deg. 41 min. East, 207.6 feet to Post No. 2, thence South 61 deg. 24 min. West 1481.1 feet to Post No. 3; thence North 13 deg. 50 min. West 196.7 feet to Post No. 4; thence North 60 deg. 00 min. East 1491.2 feet to Post No. 1, the place of beginning. From Post No. 1 U. S. Mineral Monument No. 4 bears North 59 deg. 18 min. West 404.9 feet distant.

That the said Zephyr Lode Mining Claim is bounded and described as follows:

Beginning at Post No. 1, and running thence on a true course magnetic variation, 17 deg. 20 min. East, North 67 deg. 41 min. East 567.8 feet to Post No. 2; thence South 48 deg. 23 min. East 79.6 feet to Post No. 3; thence South 60 deg. 34 min. West 543.4 feet to Post No. 4; thence North 46 deg. 01 min. West 92.8 feet to Post No. 1, the place of beginning. From Post No. 1 U. S. Mineral Monument No. 4 bears North 49 deg. 05 min. East 1272.1 feet distant.

That the said Brave Columbia Lode Mining Claim is bounded and described as follows:

Beginning at Post No. 1 and running thence on a true course, magnetic variation, 17 deg. 20 min. East, South 43 deg. 04 Min. West 206.9 feet to Post No. 2; thence South 45 deg. 53 min. East 1428.2 feet to Post No. 3; thence North 45 deg. 07 min. East 200 feet to Post No. 4, thence North 45 deg. 32 min. West 1437.1 feet to Post No. 1, the place of beginning. From Post No. 1 U. S. Mineral Monument No. 4 bears North 89 deg. 52 min. East 1810.1 feet distant.

That the said Constitution Lode Mining Claim is bounded and described as follows:

Beginning at Post No. 1 and running thence on a true course, magnetic variation, 17 deg. 20 min. East, South 42 deg. 55 min. West 200.7 feet to Post No. 2; thence South 46 deg. 13 min. East

1420.6 feet to Post No. 3; thence North 44 deg. 38 min. East 201.2 feet to Post No. 4; thence North 46 deg. 15 min. West 1426.6 feet to Post No. 1, the place of beginning. From Post No. 1 U. S. Mineral Monument No. 4 bears North 87 deg. 05 min. East 2014.8 feet distant.

62 That the said Cumberland Lode Mining Claim is bounded and described as follows:

Beginning at Post No. 1, and running thence on a true course, magnetic variation, 17 deg. 20 min. East, South 45 deg. 07 min. West 200 feet to Post No. 2; thence South 46 deg. 09 min. East 1424.3 feet to Post No. 3; thence North 45 deg. 33 min. East 199.6 feet to Post No. 4, thence North 46 deg. 08 min. West 1425.8 feet to Post No. 1, the place of beginning. From Post No. 1 U. S. Mineral Monument No. 4 bears North 85 deg. 16 min. East 2216.6 feet distant.

That the said Monroe Doctrine Lode Mining Claim is bounded and described as follows:

Beginning at Post No. 1, and running thence on a true course, magnetic variation, 17 deg. 20 min. East, South 45 deg. 25 min. West 198.5 feet to Post No. 2; thence South 46 deg. 02 min. East 1419.9 feet to Post No. 3; thence North 45 deg. 48 min. East 199.9 feet to Post No. 4; thence North 46 deg. 05 min. West 1421.3 feet to Post No. 1, the place of beginning. From Post No. 1 U. S. Mineral Monument No. 4 bears North 83 deg. 35 min. East 2417.4 feet distant.

That each of said mining claims was long since patented to the predecessors in interest of this defendant by the Government of the United States; that the patent for the said Pinyon and Pinyon Extension Mining Claim bears date October 18, 1873; that the patent for the said Boss Mining Claim bears date October 27, 1881; that the patents for the said Brave Columbia, said Constitution, said Cumberland and said Monroe Doctrine Mining Claims each bears date March 31st, 1883, and that the patent for the said Zephyr Mining Claim bears date June 1st, 1898.

That the said Pinyon and Pinyon Extension Mining Claim crosses the said Boss Mining Claim, and the area in conflict between the two was conveyed by said patent to the said Pinyon and Pinyon Extension Mining Claim.

That in said mining claims, so owned by this defendant, as aforesaid, there is a vein or lode or rock in place, bearing gold, silver, lead and other valuable metals, which, on its course and at its apex, crosses the easterly end line of the said Boss Mining Claim, and thence on its course or strike and at its apex, traverses said claim in a westerly direction for a distance of about 484 feet, where, at its apex and on its course or strike, it crosses the southerly side line of the said Pinyon and Pinyon Extension Mining Claim, and thence on its course or strike and at its apex, traverses the said Pinyon and Pinyon

63 Extension Mining Claim in a westerly direction for a distance of about 334 feet, where, at its apex and on its course it crosses the opposite or northerly side line of the said Pinyon and Pinyon Extension Mining Claim, at which point, at its apex and on its course or strike, it re-enters the said Boss Mining Claim, and thence, at its apex and on its course and strike, traverses said Boss Mining Claim in a westerly direction for a distance of about 527 feet, where, at its apex and on its course or strike, it crosses the northerly side line of the said Boss Mining Claim, to-wit, at a point about 125 feet easterly of the northwesterly corner of the said Boss Mining claim, at which point, at its apex and on its course or strike, it crosses the southerly side line of the said Zephyr Mining Claim, and thence, at its apex and on its course or strike, it traverses in a westerly direction the said Zephyr Mining Claim for a distance of about 57 feet, where it crosses the westerly end line of the said Zephyr Mining Claim, at which point, at its apex and on its course or strike, it crosses the located easterly side line of the said Brave Columbia Mining Claim, and thence on its course westerly and at its apex, passes to and across the westerly located side line of the said Brave Columbia, and thence on its course or strike and at its apex traverses the said Constitution Mining Claim, crossing both of the located side lines thereof, and thence on its course or strike and at its apex, traverses the said Cumberland Mining Claim, crossing both of the located side lines thereof, and thence on its course and strike and at its apex, it traverses the said Monroe Doctrine Mining Claim, crossing both of the located side lines thereof.

That the location of the said Pinyon and Pinyon Extension Mining Claim, and upon which said patent for said claim was issued, as aforesaid, was made or laid upon a vein which crossed the located side lines thereof, as was also the said Brave Columbia, the said Constitution and the said Cumberland and the said Monroe Doctrine Mining Claims.

That said vein dips in a southerly direction, and in its course downward so far departs from a perpendicular that it passes beyond the legal side lines extended downward vertically of each of said mining claims, so owned by this defendant, as aforesaid, and thence continuing on its dip or course downward, passes into, beneath and beyond the exterior boundaries, extended downward vertically, of the said Conkling Mining Claim, not only as the same is hereinbefore in this answer described, but also as the same is described in said complainant's bill of complaint herein.

That this defendant is the owner, in the possession and entitled to the possession, and it and its predecessors in interest, for
64 more than seven years last past, have been the owners, in the possession and entitled to the possession, throughout its entire depth, of all that portion of said vein between the following planes; first, one drawn through the easterly end line of the said Boss Mining Claim, extended indefinitely in its own direction, and another parallel thereto, drawn through the point where said vein, at its apex and on its course, crosses the northerly side line of said Boss Mining Claim, as aforesaid; and, second, between planes, one

drawn through the located westerly side line of the said Monroe Doctrine Mining Claim, extended indefinitely in its own direction, and another parallel thereto, drawn through the point where said vein, at its apex and on its course crosses, as aforesaid, the southerly side line of the said Zephyr Mining Claim.

That all of the ores at any time mined or removed by this defendant, or any of its predecessors in interest, from beneath the surface of the said Conkling Mining Claim, lay in and belonged to, and were a part of, the said vein or lode so having its top or apex in the said mining claims of this defendant, as aforesaid, and between planes, one drawn through the easterly end line of the said Boss Mining claim, and extended as aforesaid, and another through the westerly located side line of the said Monroe Doctrine Mining Claim, extended as aforesaid.

Wherefore, this defendant having fully answered, confessed, traversed and avoided or denied, all the matters in the said amended bill of complaint, material to be answered, according to its best knowledge and belief, humbly prays this Honorable Court to enter its decree that this defendant be hence dismissed with its reasonable costs and charges in this behalf most wrongfully sustained, and for such other and further relief in the premises as to this Honorable Court may seem meet and in accordance with equity.

A. C. ELLIS,
A. C. ELLIS, JR.,
RUSSEL G. SCHULDER,
Solicitors for Defendant.

W. H. DICKSON,
Of Counsel.

[SEAL.]

SILVER KING COALITION
MINES CO.,
By F. J. WESTCOTT,
Sec'y.

STATE OF UTAH,
County of Salt Lake, ss:

Frank J. Westcott being first duly sworn upon his oath, deposes and says that he is an officer of the defendant corporation above named, to wit: the secretary thereof; that he has read the above and foregoing amended answer and knows the contents
65 thereof and that the same is true of his own knowledge except as to matters therein stated upon information and belief and as to such matters he believes it to be true.

FRANK J. WESTCOTT.

Subscribed and sworn to before me this 14th day of December, 1911.

[SEAL.]

ALLIE LEVY,
Notary Public.

My commission expires May 27, 1913.

Copy of the above and foregoing amended answer received and due service admitted this 14 day of December, 1911.

WILLIAM H. KING,
[Solicitors] for Complainant.

Filed Dec. 16, 1911.

JERROLD R. LETCHER,
Clerk.

Replication to Answer.

This replicant, Conkling Mining Company, saving and reserving to itself all and all manner of advantages of exception which may be had and taken to the manifold errors, uncertainties and insufficiencies of the answer of the defendant Silver King Coalition Mines Company, for replication thereunto says that it does and will aver, maintain, and prove its said bill to be true, certain and sufficient in the law to be answered unto by the said defendant, and that the answer of the said defendant is very uncertain, evasive and [insufficient] in law to be replied unto by this replicant; without that, that any other matter or thing in the said answer contained, material or effectual in the law to be replied unto, and not herein and hereby well and sufficiently replied unto, confessed or avoided traversed or denied, is true; all which matters and things this replicant is ready to aver, maintain and prove as this honorable Court shall direct and humbly prays as in and by its said bill ~~is~~ has already prayed.

CHARLES C. DEY &
A. L. HOPPAUGH,
Solicitors for Complainant.

Received copy of above [replication] this 2nd day of September, 1909.

DICKSON, ELLIS, ELLIS &
SCHULDER,
Solicitors for Defendant.

Filed Sept. 2, 1909.

JERROLD R. LETCHER,
Clerk.

It is hereby stipulated and agreed that the time for the taking the evidence or the testimony in the above entitled action, be extended by order of court and taken as follows: the [plaintiffs] to commence the taking of [their] testimony upon ten [days'] notice to the defendant company, and proceed daily therewith, Sundays and holidays excepted, to a conclusion; that upon such conclusion by the plaintiff of [their] evidence, the defendant company will commence, and from day to day, thereafter, Sundays and holidays excepted, continue the taking of its evidence until concluded, and when so

concluded, the [plaintiffs] will commence with [their] rebuttal evidence and continue therewith daily, Sundays and holidays excepted until completed.

Dated Nov. 24, 1908.

WILLIAM C. HALL,
Attorney and of Counsel for [Plaintiffs.]
DICKSON, ELLIS, ELLIS &
SCHULDER,

Attorneys and of Counsel for [Defendants]
Silver King and Coalition Mines Company.

Filed Nov. 30, 1908.

JERROLD R. LETCHER,

Clerk.

(Order as to Taking of Testimony.)

Upon stipulation by the parties in and to the above entitled action and their respective attorneys, and good cause being shown therefor, it is ordered that the time for taking the evidence or testimony in said action be, and hereby is extended, and it is hereby ordered that said evidence or testimony be taken as follows: The [plaintiffs] shall commence the taking of [their] testimony upon ten [days'] notice to the defendant company, and proceed daily therewith, Sundays and holidays excepted, to a conclusion; that upon such conclusion, the defendant company shall commence and from day to day thereafter, Sundays and holidays excepted, continue the taking of its testimony until concluded; and when so concluded, the [plaintiffs] shall commence with [their] rebuttal evidence, and continue therewith, daily, Sundays and holidays excepted, until completed.

Dated this 30th day of November, 1908.

J. A. MARSHALL,

Judge.

Filed Nov. 30, 1908.

JERROLD R. LETCHER,

Clerk.

67

(Stipulation as to Trial.)

In confirmation of verbal stipulations heretofore from time to time made, it is now hereby stipulated and agreed by and between the solicitors for the respective parties in the above entitled cause as follows:

1st. That all the issues in said cause, except only the accounting prayed for, are to be tried before said Court at the earliest practicable time after the first day of June, 1910.

2nd. That after the trial and determination of said issues by said court the accounting, if the Court shall determine the plaintiff is entitled thereto, shall then be referred to the Master.

Dated this sixth day of May, A. D. 1910.

DEY & HOPPAUGH,
Solicitors for Complainant.
DICKSON, ELLIS, ELLIS &
SCHULDER,
Solicitors for Defendant.

Filed May 7, 1910.

JERROLD R. LETCHER,
Clerk.

(Statement of Evidence. Filed in the District Court on April 21, 1913.)

This cause came on to be heard before this Court, Hon. John A. Marshall, U. S. District Judge, presiding, on the 15th day of January, 1912, the plaintiff being represented by its Solicitors, Mr. E. B. Critchlow and Mr. William H. King, and the defendant by its Solicitors, Mr. William H. Dickson, Mr. A. C. Ellis and Mr. Thomas Marioneaux. By agreement and by consent of Court, the testimony was produced orally before the Court. On this day there was taken on behalf of defendant out of its order, the testimony of Charles H. Gitsch.

(TESTIMONY FOR DEFENDANT.)

Testimony of Charles H. Gitsch.

I reside at Salt Lake City. Am fifty-six years old and have been engaged in mining since 1878 in Nevada, Idaho and Utah. I was once employed by the Crescent Mining Company at Park City. Started in in 1881 and worked continuously on Crescent Hill to 1889—first as a miner, then as a Shift Boss for the Walker and Buckey; then timberman for the Climax and Shift Boss for the Rebellion about two months, and then took charge as Foreman under Stuart Stephenson.

68 I have examined this map, Exhibit A, in the last few days. I recognized the Aetna tunnel and worked in some of the workings leading from that. The Aetna west drift we started in the Spring of 1887, when I was Foreman. The Aetna Tunnel struck the vein a little southerly of what is called the Boss Tunnel Level. We found there waste and low grade iron. The vein was 105 feet wide at that place. We called it a fissure. Its average width was from 50 to 105 feet wide on the Aetna level. This map was before my time. I started the work and sunk the Apex shaft. I drove the west drift through to the connection with the Apex winze. We had ore all the way from the west Aetna tunnel. We got ore all the way along here. It was in pockets in the fissure. We had more or less low grade ore all the way and then we struck a higher grade of ore near Station 457. It was high grade ore, 325 ounces. There were two verticals stopped right there. They were about two

inches thick and then there was a filling between the two and then another one practically the same grade of ore, about 325 ounces. There was a lower grade of ore between the two verticals. Then we went along with the Aetna No. 2. Started off a cross-cut about Station 504, I think about twenty or thirty feet. We went out in the fissure. It was lead and sulphur ore. I made this cross-cut out here about twenty feet to the letter "B" in Baskin. In the fissure I had low grade lead ore—milling ore—with more or less sulphur and iron in it.

I did work easterly and where the Aetna West drifts connects with the Aetna Tunnel. I had a bulkhead put in there 250 feet from the shaft house. That would bring it close to this end where there had been some trouble and litigation on the hill. This 200 feet was in the fissure low grade and here at a place marked Raise an inch and a half on this map Easterly to Station 394, the ore was better. The Raise went up in ore. Mr. Ferry was running a level out to this Station 448 and also along this fork along the Boss line. They raised it up about forty feet and they were stoping here on ore. Mr. Ferry was the opposing party in the litigation. The first work I did here was in cross-cut No. 1, near Station 408½. This I ran up about 26 or 27 feet. I took a vertical and struck the line there in the face of the cross-cut. I struck ore about three feet out from the bottom of a vertical winze. There was only a small pocket. I started down on that and it opened out into a kind of flat stope in the limestone. There were two stopes in the limestone, one above the other. They were about twenty-two feet apart and there was carbonate ore separating the two. Part of the McGregor stope was worked out while I was Foreman—the northerly portion. There was still ore when I left about three feet in thickness. The other

flat stope that I spoke of below was worked out. This extended about sixty feet from the fissure out into the lime.

Along the drift westerly that ore body extended about forty feet long in the limestone. It averaged about four feet in thickness. When we worked it out we found barren lime in close proximity to the ore body. There is also little fissures running from this main fissure to the ore body. There were cracks and crevices, some of which you could see and some pinching right out. The ore in the McGregor stope connected with the ore in the fissure above the level about thirty feet. The stope beneath also connected with the ore in the fissures.

We went up in a raise from the west drift twenty or twenty-two feet and struck the flat stope that was some time right in the fissure and that tended to carry us to the North drift, and then we came into the Aetna and started to raise up. That is the place between Stations 429½ and —. That is a flat stope. We went up there about 165 feet in a fissure on low grade ore all the way, with small chunks and pockets of ore through there, throughout the entire length. When we got out this distance we started a drift both north and south at Pete's drift. After we ran out a ways we struck quite a large stope. The ore was not over three or four feet thick, but it was high grade, solid galena. The ore body extended from the Aetna West drift up

directly to what is marked as "Simpson Drift;" Afterwards we ran another raise up there and struck the ore.

The raise from Station 429 N was all run in low grade ore in the fissure. The ore body was worked further to its top from Pete's Drift. It extended in an easterly and westerly direction about 160 or 170 feet and averaged about two feet of fine galena within the fissure. We drove westerly about 600 feet from the Aetna shaft. The level was driven in the fissure all the way. We had ore all the way—some low grade and some first class. We sank the Aetna incline shaft 225 feet down to below No. 2 Level. It went down in the fissure. We had little bunches of ore leading off from the shaft and quartz and vein material. When we got down to No. 2 Level, we went out in a westerly direction about 246 feet in the fissure in low grade ore all the way. At 445 F we started to raise up on the ore that showed which had a tendency to go toward the shaft. It broke into the shaft and we stoped there. That was in the fissure.

Between Stations 487 and 488 we ran a cross-cut out to the hanging and there we struck the porphyry and lead ores with sulphur and iron. Then we came back and ran another cross-cut between 448 and 449. There we struck the porphyry again and lead ore about six inches wide. The porphyry was a part of the vein. We would find this ore in the porphyry and the line right next to the 70 porphyry. The hanging wall of the vein was lime. We regarded the porphyry as a part of the vein, but we never drifted into it very far because we always get water. We had a raise running from No. 1 Level to the Boss Level No. 2. There was shipping ore in it and milling ore.

I have been in Level No. 4 from the Hanauer Tunnel in the last few weeks. Was there five days to make an examination in common with Mr. Wiley and others. We went in there as far as a little west of the Columbia raise, where we took the first sample, and sampled from there easterly to the cross-cut, taking the measurements. We sampled all the way from 18 feet to 100 feet between samples. Mr. Wiley had charge of all the samples. At the various places there was some low grade and some possibly shipping ore. The drift shows more or less stoping all the way along. It is an old drift made some years ago and has been re-timbered, and we took the samples mostly in the porphyry, but all in the fissure.

I have gone up the workings connecting the Elephant stope to the surface and made as careful an examination as timber and water would permit. The raise gets into the hanging country only two places. I should think the raise was between 900 and 1,000 feet up before it gets into the hanging country.

I went into the cross-cut marked "Custer." It is in ore, and so also the Engine drift. Was also in the cross-cut at the F drift. Found some shipping and milling ore. The K-k incline is in the fissure wherever we could see it. It is lagged up very close with plank. We went up No. 1 level and then back to connect with the Columbia raise No. 3. Went up K-K incline to Station 667 and then to 639. This work is in the vein. There is low grade ore all the way through there. Continued up the Columbia Raise to the 400 Level; then up

the Reimer Raise; then up the Mahoney. These were up in the vein. No. 3 Level is driven in the fissure with low grade ore. I took samples at the bottom of the Johnson Raise. It was milling ore. I didn't see any shipping ore through there. We went up to the Apen Level, marked in purple on the map, Apex Tunnel. I have been in the workings shown colored in green, extending easterly and westerly from the Constitution Tunnel. This is driven north in the apex of the fissure right through there. There are places where you can see the grass roots or vegetation. We found little spots of ore at different places all the way through there. The best showing is just a little west of No. 2 Shaft in this cross-cut in the west end of the present workings. In the vicinity of the Constitution Tunnel we took out samples all the way from 30 to 50 feet apart.

Cross-examination:

My familiarity with the Crescent workings ceased in 1889. When I took charge of the work, the Aetna Tunnel was in as far as the Aetna West drift. Sometimes I speak of the vein and sometimes the fissure. I make no distinction. I used to sometimes speak of the vein and sometimes of the fissure; they are one and the same. That is the way we made use of them when I was working there. We made the distinction between the fissure and a bedded vein and drew a sharp distinction between them. I am not an expert and cannot tell any more clearly than I have what composed the vein; only I know it is vein material in the fissure or in the bed. A large part of the vein material is porphyry. As we went down into these lower workings known as Level 2, Level 3 and Level 4, we had more porphyry than we had above. We regarded it as a part of the vein. The porphyry was on the foot wall side; the bigger part of the vein would be on the foot wall side. There is no break of the lime beds. They seemed to have the same pitch, dip and strike. I was Shift Boss for the Walker and Buckey in 1882. This was my first responsible work. I first became acquainted with the workings in a responsible position when I became Foreman for the Crescent in 1886 under Stuart Stephenson and continued until July 1st, 1889.

As we ran easterly from the Aetna Tunnel in the Boss Level No. 2 shown on Exhibit A, we ran in the fissure. The vein material was quartz and ore, sometimes low grade, sometimes first class. I hardly think that is open at the present time. It is pretty heavy ground and I would not think it would be open. We followed up a Raise from the Boss Level No. 2 at a point 250 feet east of the Aetna Tunnel. This raise did not go into the hanging country or the foot country; it went right in the vein and we followed up the ore. We never had any occasion to take out the ore in the hanging country. All the ore whenever we struck it was in the fissure and in the foot country. When it was not in the vein it was in the foot country, and not in the hanging. The fissures and crevices I speak of run into the foot wall country. All these connections with these bedded veins that lay in the lime were in the foot wall. The fissure vein would naturally strike right through the country, and the bedded veins,

some of them, were flat, and others would have a slight dip to the north or west, and in some places have a dip from 12 to 25 degrees to the east. These bedded veins always lay conformably to the beds of the limestone, always dipping a little to the north;

72 I mean the rake was a little to the north and west. That is what I understood to be the dip of the lime beds. The dip of the vein would be conformable to the lime beds. We always distinguished these bedded veins because they always led out in the lime in the foot wall part of the fissure. In their extent out from the fissure they varied from 60 to 150 feet. We would be led to these bedded veins from the fissure veins by seeing some of these little verticals cutting through there—vertical fissures, as they called them,—that would lead from the main fissure to these bedded veins. The ordinary way of speaking of them was as verticals. There would be a little bed of ore and from a half inch to a quarter of an inch of filling between them, and sometimes a little talc and quartz and sometimes a little oxide also. These verticals would always strike out from the foot wall side of the fissure, and of course the porphyry side of the fissure is always the hanging part of the veins. The ore on the porphyry part of the vein always carried sulphide of lime in it and iron in it, while the other, which was always higher in the lime beds, was carbonate. The ore would generally be on the foot wall side. I do not remember any place where it was on the hanging; it was always on the foot wall part of the porphyry. When I speak of the vein being 60 to 105 feet wide, I am speaking of the distance measured from the hanging side of the porphyry at right angles to the dip of the vein over to where we struck the lime on the foot wall. That would be the limit of mineralization. It would be where we would distinctly and clearly see the lime again.

At the bottom of No. 1 Winze, running to the west and north, there is a little drift starts off with a black dot there right at the edge of the McGregor stope, and below it. It is marked No. 1 Winze. It was a level drift; went right out into the foot wall. There was a little vertical, which was the indication which led me out on that level drift into the foot wall. This vertical had about the dip of the fissure, but it ran a little more westerly than the fissure, and led me off into that lime. I followed the vertical when I went off. The vertical was only an inch or two wide, with half an inch of ore or something like that, giving an indication to follow to get ore. We followed it off into the foot wall on this drift 30 feet to the bed. At the end of the thirty feet, the vertical was still in the vein, going on farther into the foot wall. I then sank down and followed it in a vertical winze, and we struck ore about seventeen feet down. It showed in the corner of the shaft. And then I went down I guess about 20 or 22 feet and got more ore. We started stoping right from the shaft.

73 When we got into the ore bed that was a very flat stope. It was flat and of course the vertical disappeared. We raised on this vertical six or seven feet above the top of the winze, until we struck the ore again. So that between the flat ore body that we sunk on in going down and the ore body we struck in each winze six or seven feet above the drift, there were six continuous verticals. The

ore we struck above was larger than the one below, but I did not stay long enough to stope that all out.

At No. 2 Winze there were a couple of these verticals that carried very high grade ore. It is at Station 487. There is quite a body of ore there. We followed these verticals up 20 or 22 feet, if I remember right, and then you come into a flat stope,—as flat as the one below that. It was nothing but sand carbonate and the average height was possibly about five feet. These verticals are right in the fissure. It was quartz. The verticals would have a strike more west and east than the main fissure. They were easily distinguishable from the rest of the country on account of the lead and chloride in it. These were the first verticals we observed along the Aetna West drift between the place we got ore over to the easterly and Raise No. 2. In going along the Aetna West drift the next time, we came to verticals, we again found ore. These verticals connected with another stope between No. 1 and the Aetna Tunnel. We had ore possibly to 25 or 30 feet below the level of the Aetna West drift. All that stope between the Aetna and Aetna No. 1 was all in the fissure. I mean it was between the porphyry on the hanging wall and the limestone on the foot wall.

After having found the ore in Raise No. 1, we next found it in Raise No. 2. Going on westerly in driving the drift, we had more or less ore all the time in the drift. We did not start any stopes, but we saved the ore we found as we were driving the drift—maybe a mine car or two a day in driving the drift. It was milling ore. There were little ore pockets we would strike right along in the vein driving along in the fissure, but it was not ore all the time, of course.

The next place westerly of Winze No. 1 where we found indications which led us to ore was at a little cross-cut that runs up to a winze or an incline between the words Baskin and Stope. We found a little ore in a cross-cut marked in blue, opposite Station 437. That was run into the foot wall. We did not follow anything. It ran perhaps fifteen feet and we got nothing. Then we ran the cross-cut which I indicated before as being between the words Baskin and Stope. We did not find anything in that one either. We did not have any vertical to run to. Next at a point at the letter B in the word Baskin, we found a vertical with some lead ore in it. It was high grade, but small. We ran off that about forty feet and got that same streak of ore. We ran away from the vein but did not get outside the limits of it; that is to say, we had not yet got into that part of the country which was not mineralized and which I recognized as the foot wall of the vein.

We started Raise No. 2 from the Aetna drift and went up 165 feet. We were following ore in the fissure, not in a vertical but in the main fissure, in the vein. We got a little better indications up here so we started a level across, so that we got into this stope, and we run this level No. 2 and raised up in this part on ore. I am now speaking of the west end of the Armstrong drift.

On level No. 2 going westerly from the shaft the first indication of ore was very close to the shaft. It was right in the fissure, and then right in the northeast corner of the station we stoped a little ore

in the fissure. Going west on No. 2 I did not follow any verticals because I was driving the level. I got that through some 240 feet and then I left. It was on the foot wall of the porphyry.

I was working for the Crescent Company. We had some difficulty over property rights. The Crescent Company was working its ground. We started on what is called the Aetna and run that tunnel 2,000 feet on the fissure vein. Mr. Ferry was working the Ross claim. We thought we were on the apex of the Buckey or Zephyr and we were following it on the dip towards the old Sampson, towards the southeast. That was not the same vein that we were working in taking out ores up to the northerly, because that is all McGregor ground up there. The McGregor stope was imbedded in the lime bed. Those in the Pete's drift and Chute drift were not. They stood up at the same pitch as the fissure, at about 68 degrees.

I was recently in the Hanauer tunnel with Mr. Wiley. I had not been in there since about 1891, when we had a lease upon the Crescent for a little while. The ore is not showing at every place where the walls of the tunnel are exposed, because the ore was stoped out and we had to take it wherever there was a little left, wherever there was any ore, and stoped continuously along the Hanauer tunnel, but there were stopes along there. I don't know that I could point out exactly; they are filled up with old timbers. My basis for saying that ore was stoped all along is that I saw filling, old timbers piled in there any way, and they looked like old bulkheads and filled with different things. I cannot point out on the map the places where ore was stoped. I did not look for stations. Therefore I cannot say, but there were different places along the drift where ore had been
75 stoped. We would come to the edge and look and if Mr.

Blood was with us he would show us where there was some ore and there we took samples. All the samples we took in that drift were from what we supposed to be ore and we did not take samples of anything else. In going down the Columbia raise I think there was only one place where I saw a vertical. I saw one on the No. 1 level of the K-K.

Redirect examination:

I am familiar with a stope at the easterly end of which is the word "Tunnel" and about the middle of which is a working called "Ole's drift," from which point it extends westerly some six or seven inches on this map. The ore here lies in the bed. Its dip is west about 12° north and conforming with the dip of the limestone in that immediate vicinity. That stope was not all worked out before I quit working there. We thought we had all of that out, but that was the big stope and we had to leave pillars of second class ore there. The enclosing wall was exposed on the top and bottom. It was barren lime.

Monday, January 29, 1912, the trial of the cause was resumed, counsel for the respective parties being present.

Counsel for plaintiff stated that by agreement of counsel the ques-

tion of the ownership of the premises of controversy and the ownership of the vein situated thereon was to be tried, and that it was stipulated that a decree should be entered upon those issues, and if they should be resolved in favor of the plaintiff, an accounting would then be ordered. To this statement counsel and the court assented.

Counsel for plaintiff then offered in evidence a patent of the United States to the Conkling lode mining claim, U. S. lot No. 689, which was marked "Ex. 1, J. W. C." This patent is dated February 23, 1892 and is issued to the Ross Mining Company. It is in the usual form of United States patents and the description of the premises conveyed thereby is in words and figures following, to-wit:

"With magnetic variation seventeen degrees and twenty minutes east.

Beginning at corner No. 1, a pine post four inches square marked U. S. 689 P. 1.

Thence first course north twenty-one degrees and nine minutes west three hundred feet to discovery point six hundred feet to corner No. 2, a pine post four inches square marked U. S. 689, P. 2, being also corner No. 4, of lot No. 191, the Lincoln lode claim, and 76 corner No. 2 of lot No. 580, the Pirate King lode claim from which U. S. mineral monument No. 4 bears north thirty-two degrees and fifty-two minutes west nine hundred and thirty-nine and three tenths feet distant, and a pine tree four inches in diameter marked U. S. 689 P. 2. R. T. bears north thirteen degrees west twenty-eight feet distant.

Thence second course, south sixty degrees and forty-five minutes west one thousand five hundred feet to corner No. 3.

Thence third course south twenty-one degrees and nine minutes east six hundred feet to corner No. 4.

Thence fourth course north sixty degrees and forty-five minutes east one thousand five hundred feet to corner No. 1, the place of beginning; said lot No. 689 extending one thousand five hundred feet in length along said Conkling vein or lode, and containing twenty acres and forty-five hundredths of an acre more or less."

Stipulation.

Counsel for the respective parties then stipulated that the plaintiff, Conkling Mining Company, and the defendant, Silver King Coalition Mines Company, are tenants in common of the Conkling lode mining claim, U. S. lot No. 689, and the Arthur lode mining claim, U. S. lot No. 090, and that they and their predecessors in interest have been such tenants in common for more than ten years last past, the plaintiff owning an undivided three-fourths and the defendant owning an undivided one-fourth of each of said mining claims.

Thereupon the plaintiff rested its case.

DEFENDANT'S CASE.

There was offered in evidence by the defendant the United States patents issued and dated October 18, 1873, to James Lowe and others for the Pinyon and Pinyon Extension lode mining claims, U. S. lot No. 42. This patent is in the usual form of United States mineral patents, and the claim is described substantially as laid and marked upon the map, Plaintiff's Exhibit A.

There was then offered and received in evidence United States patent issued for the Zephyr lode claim, U. S. lot No. 439, issued and dated June 1, 1898 to the Boss Mining Company. This patent is in the usual form of United States mineral patents, and the premises conveyed are substantially as shown upon the map, Plaintiff's Exhibit A.

77 There was then offered and received in evidence United States patent to Edward P. Ferry for the Boss claim, U. S. lot No. 126, issued and dated October 27, 1881. This patent is in the usual form of United States mineral patents, and the premises conveyed are substantially as laid and shown upon Plaintiff's Exhibit A.

Defendant then offered and there was received in evidence a patent from the United States to the Apex Mining Company for the Brave Columbia lode mining claim, U. S. lot No. 214, issued and dated March 31, 1883. This patent is in the usual form of United States mineral patents, and the premises conveyed are substantially those laid and described on the map, plaintiff's Exhibit A, excepting, however, therefrom the area in conflict with U. S. lot No. 40, and in the area in conflict with the Buckey lode mining claim, U. S. lot No. 41, and the area in conflict with the Boss lode mining claim, U. S. lot No. 126, and the area in conflict with U. S. lot No. 200.

There was then offered and received in evidence the patent to the Apex Mining Company for the Constitution lode mining claim, U. S. lot No. 215, issued and dated March 31, 1883. This patent is in the usual form of United States mineral patents, and the premises conveyed are substantially as shown and laid upon the map, plaintiff's Exhibit A, excepting, however, the premises embraced in U. S. lots No. 40 and 200.

There was then offered and received in evidence U. S. patent to the Apex Mining Company for the Cumberland lode mining claim, U. S. lot No. 216, issued and dated March 31, 1883, the premises conveyed being substantially those laid and shown on plaintiff's Exhibit A., excepting, however, therefrom the premises embraced in U. S. lot No. 40.

There was then offered and received in evidence U. S. patent to the Apex Mining Company for the Monroe Doctrine lode mining claim, U. S. lot No. 217, issued to the Apex Mining Company, and dated March 31, 1883. The premises conveyed are substantially those shown and laid upon plaintiff's Exhibit A, there being excepted the portion in conflict with U. S. lot No. 40.

Stipulation.

It was stipulated between counsel in open court that the defendant, Silver King Coalition Mines Company, and its predecessors in interest have been the owners of and in possession of the Custer No. 2 and the Silver Hill No. 4 lode mining claims, U. S. No. 4850, the Pinyon and Pinyon Extension, the Boss, the Zephyr, the Brave Columbia, the Constitution, the Cumberland, the Monroe Doctrine, and an undivided one-fourth of the Conkling lode mining claims, since the dates of the patents to the respective claims.

CHARLES P. BROOKS.

This witness produced by the defendant, testified as follows:

I am a civil and mining engineer and have resided in Utah a great many years. I graduated from college in 1870 and have followed my profession actively and continuously since that time. Am acquainted with the mining properties shown on plaintiff's map, Exhibit B and have made surveys to establish the surface boundaries.

I have copied upon the map marked "Ex. B. J. W. C." the result of surveys which I have made. The Boss is there represented, and the Nero, lot 192, lies south of the Boss and adjoining it.

Mr. Dickson: The Nero is not one of the claims as to which stipulation for title is made but it is referred to in fixing the boundaries of the Conkling.

The Witness, continuing: The Pirate King joins the Nero on the south side and is lot 580. Post 1 is at the northeast corner; post 2 at the southeast corner; post 3 at the southwest corner, and post 4 at the northwest corner.

The Conkling is also shown. Post No. 1 is at the southeast corner of the Conkling; post No. 2 is at the northeast; post No. 3 at the northwest, and post No. 4 at the southwest. The portion colored yellow shown on the map, immediately west of what I have pointed out as the west end of the Conkling claim, represents the difference between the calls in the patents of the Conkling and the monuments as found on the ground. The monuments found upon the ground would put the west end line where I have indicated it by these posts. The Brave Columbia, the Constitution, the Cumberland, the Monroe Doctrine and the Zephyr lode mining claims are also shown on this map, and the numbered posts are as shown. These claims are correctly platted according to my survey made in the field, and the posts as I found them upon the ground from the monuments. The east end lines of the Sampson, Grand Prize and Lincoln are also shown upon the same map. I did not find standing any of the corner posts or location monuments of the Boss mining claim that I could identify. I platted that claim from the junction made with the Baby Mine, lot 127. The westerly end line I es-

79 tablished from its connection given in the field notes of the survey for patent of the Brave Columbia. This was established by Adolph Jessen, who has been dead a number of years.

There was also offered in evidence and received without objection the official field notes of the Zephyr lode mining claim and the official field notes of the Brave Columbia lode mining claim.

I have placed the Boss upon the map. Post No. 1 is tied to U. S. mineral monument No. 4 and is given as a calculation, not an actual connection. I have made a survey and established the course and distance by actual survey and find it different by seven degrees in course and about $32\frac{1}{2}$ feet in distance. If we were to take the call in the field notes it would place the Boss claim about twenty-five or thirty feet farther east from where I have platted it.

There was offered in evidence and received, subject to the objection made by the plaintiff hereinafter set forth, the official field notes of survey of the Nero lode mining claim.

The Witness, continuing: I found at post No. 1 of the Nero an old post lying upon the ground on a mound of stones, in 1908. There is a bearing stump from that post called for in the official notes as follows: "Set quaking-aspen post 4 feet long, 4 by 4 inches square, 1 foot deep in mound of stone and earth, marked U. S. 192, P-4 for post No. 4, by side of location stake, and post No. 1 of the Grand Prize, lot No. 90 and post No. 1 of the Lincoln mining claim, lot No. 191, from which a balsam stump 10 inches in diameter bears north 57° 23 feet distant." I have no record at that place of any bearing tree and have no note of having found the stump that is called for in the field notes. I found a post lying on the ground in 1908. It was properly marked as a corner of the Nero. It was marked "August 28, 1902, U. S. 192 P. 1."

I found the corner post of the Baby or the Sampson or the Grand Prize. I think these posts were standing in a mound of stone. They were marked as that corner. I have indicated on this map what I found at that corner.

On July 29, 1882, I was engaged in making a survey of the Missouri lode, lot 232, and at that time I found a post of the Nero. I found post No. 2 of the Nero at the time I made that survey. I don't think I have seen it standing since that time. I found it lying upon the ground in that vicinity, in the neighborhood of the corner, on November 3, 1910.

On September 2, 1908, I found an old quaking aspen in mound of stones, very much rotted, but with marks still visible. These were "U. S. 192, P. 3, U. S. 580, P. 4." There was one post
80 marking both corners, and also there was another post marked "For lot 580, a newer post." There was a bearing tree called for near that corner from the field notes. The bearing trees were bearing tree to lot 580 that I found. I did not find any bearing trees to lot 192, or at least it don't show it. In the field of the Pirate King the northwest corner of that claim and the southwest

corner of the Nero were identical, but the bearing trees called for are found in the official notes of the Pirate King. The survey of the Pirate King was June 20, 1888, made by Adolph Jessen.

The field notes of the Pirate King were then received in evidence by the court, subject to objections to be made.

Among the field notes of the Pirate King is the following: "From post No. 3 a balsam pine 14 inches in diameter bears south $14^{\circ} 15'$ east 28 feet distant, marked U. S. 580, P. 3, B. T."

I found a tree so marked. It is still standing. My notes show that it bears south $39^{\circ} 37'$ west 26.9 feet distant, while the field notes call for south $14^{\circ} 15'$ east 28 feet distant. The tree as I found it is marked by a red triangle with a little representation of a pine tree upon my map, Exhibit B, and marked "Nail in red balsam", &c. It is so marked upon the ground. If we take the courses and distances as called for in the field notes of the Pirate King this tree would be as represented by the dotted blue line with a blue circle, marked "B. T." in a southerly direction from the tree mentioned in the notes.

Taking the field notes of the Conkling there is a red pine 17 inches in diameter bears north $16^{\circ} 16'$ east 35 feet, marked "U. S. 689, P. 3-B. T." I found the tree standing, marked as called for. I found the courses nearly the same as those found in the official field notes, but the distances were different. It was the difference between 22.1 and 35 feet.

Drawing a line between two trees as they would be, if called for in the field notes upon which the survey for the Conkling, was based, I find that the lines as I found it upon the ground would be between these two points. Taking the bearing trees as found upon the ground and the courses and distances as called for in the field notes, it would place the southwest corner of the Pirate King substantially where I have platted it, within a foot or two.

There was offered and received in evidence, subject to the objection of the plaintiff, hereinafter set forth, a certified copy of the field notes of survey of the Hope mining claim, lot 260. This survey was made May 16, 1882, by Joseph Gorkinski.

81 Mr. Dickson: Now, in the field notes of the Nero it describes the northeast and southeast corners as being 33 feet easterly of the east end line of the Boss, and the reference in the Nero notes where it is stated that the northwest corner of the Nero is 33 feet on a certain course easterly from the southwest corner of the Boss, which would place it 135 feet further west than we have it platted, but the same surveyor in making the survey of the Hope afterwards according to the field notes says:

"Commencing at the discovery (of the Hope) of the claim where I set a balsam post 6 feet long, 4 by 3 inches square marked U. S. 260 D. S. (for discovery stake) from which a burned pine stump 30 inches in diameter bears south 85 degrees 45 minutes, (West ?) 60 feet distant; a shaft 12 feet deep bears south 48 degrees 45 minutes

west 151 feet distant. I run thence south 12 degrees 40 minutes east along the eastern end line of this claim to the westerly end line of Nero lode, lot No. 192 103.5 feet; set a balsam post 5 feet long, 6 by 5 inches square, 1 foot deep in mound of stones and earth, marked U. S. 260 P. 1 for post 1 by side of location stake; from which a balsam stump 10 inches in diameter bears north 29 degrees east 3 feet distant; and post No. 2 of U. S. lot 212 Red Fox mining claim bears south 62 degrees 20 minutes west 28 feet distant. Thence north 12 degrees 40 minutes west along the eastern end line of this claim, and the westerly end line of Nero, lot 192, 97.64 feet, intersecting the northerly side line of Democrat, lot 84, north 48 degrees 15 minutes east 117 feet from post 4 by calculation, 187 feet, post 2 Nero on line and intersection of southern side line of Boss lode, lot 126, mining claim, north 69 degrees 45 minutes east 168.5 feet post No. 5 of said claim, 207 feet set a balsam post 6 feet long by 3 inches by 3 inches, 1 foot deep in mound of stones and earth, marked U. S. 260 P. 2, for post 2."

Witness, continuing: This brings it just where I have platted it, within three of four feet. Adolph Jessen made the patent survey of the Conkling.

There was then offered in evidence a properly certified copy of the official field notes of the survey of the Conkling, lot 689, surveyed Nov. 19, 1889, marked Exhibit O. These notes were in the usual form and that portion of the same which has reference to corners 3 and 4 of the Conkling claim is as follows, to-wit:

82 "Thence S. 60 deg. 45 min. W. along southeasterly side line of L. 580, Pirate King lode, and northwesterly side line of this claim. 1,500 feet.

P. 3 of L. 580, Pirate King lode, and northwesterly cor. of this claim, both on line; said latter cor. being a pine post 4' x 4" x 4" firmly set; mark same U. S. 689 P. 3 for post No. 3, from which a balsam 14" in [dis.] bears S. 4 deg. 15 min. E. 29 ft. distant and a red pine 17" in dia. bears N. 16 deg. 15 min. E. 33 feet distant, both marked U. S. 689, P. 3 B. T.,

thence S. 21 deg. 9 min. E. along southwesterly end line of claim. 600 feet.

Southwesterly cor. of claim a pine post 4' x 4" x 4" firmly set, on line, mark same, U. S. 689, P. 4 for Post No. 4, thence

N. 60 deg. 45 min. E. along southeasterly side line of claim. 1,500 feet.

Post No. 1, the place of beginning survey exterior boundaries. Area of claim, 20.45 acres."

To the introduction of this testimony and to the introduction and consideration of any testimony whatsoever tending or purporting to fix the location upon the ground of corners No. 3 and 4 of the Conkling lode mining claim, U. S. lot 689, counsel for plaintiff objected, for the reason that the same was incompetent, irrelevant and immaterial, and for the following reasons:

First. That at the time this patent was issued, that has been introduced in evidence, under the laws of the United States, the Land Office was empowered to determine all questions preliminary to the patent, including the location and boundaries thereof. The patent is a judgment of the Land Commissioners upon the question which it had the power to adjudicate, including the boundaries. It issued this patent in execution of its judgment and the patent is free from ambiguity and entirely free from conflict, and it is incompetent to go behind the patent as to the preliminary facts upon which it was based to over-throw or modify the boundaries as fixed in the patent by clear and unambiguous language.

Second. This conveyance by the United States to the grantee in this patent is free from ambiguity, the eastern corners 1 and 3 (2) being conceded not in dispute and no monument—nothing called for in the conveyance for corners 3 & 4 whatever.

The Court: You say the patent does not call for corners 3 & 4?

Mr. McHugh: For any post, tree or monument at the corner.

The Court: Does it not call for corners at 3 & 4?

Mr. McHugh: It starts at corner 2 and gives a certain course to corner No. 3; thence 600 feet on a certain course to corner No. 4 and thence on a certain course to corner No. 1. At corners No. 1 and 2, the patent does refer to monuments upon the ground and posts at the corners and bearing trees and objects for corner No. 1 and corner 2, but it does not for corners No. 3 and 4, and therefore it is incompetent to introduce other testimony contradicting or modifying the effect of a conveyance which in itself is free from ambiguity,—to introduce an ambiguity by this document and then offer to explain it by parol evidence.

Third. If it is justified by the introduction of this testimony, as we assume it will — intended to be justified, by the Statutes of the United States as passed in 1904, which provide that the monuments and lines as laid upon the ground are controlling over the description and courses and distance given in the patent, the plaintiff insists that that statute if construed to be retroactive and to apply to our patent that was issued a great many years before the statute was passed, that then the statute is unconstitutional because it takes away or attempts to take away from the grantee in this patent, property conveyed to it without due process of law and would be, in fact, an attempt on the part of the United States Government to violate its contract and to take back its land that it had already theretofore granted, which would be taking property without due process of law in violation of the 5th amendment, and therefore of course no justification for this proceeding. I want to get that objection in to all of this class of testimony.

The Court: The evidence will be admitted subject to that objection and finally determined when the case is determined. I assume that objection will apply to all evidence of the same character so that it need not be renewed?

Mr. McHugh: That is what I intended.

The objection thus made to the introduction of said testimony and all objections made by Counsel for plaintiff to the introduction of evidence tending to show the position of the Conkling Lode Mining Claim on the ground were finally ruled upon by the Court on July 15th, when the issues were decided; and the objections were then overruled and the testimony admitted and an exception to the ruling granted the plaintiff.

84 Witness, continuing: I found the posts at the two west end corners of the Conkling. On August 27, 1901 I found corner No. 4 of the Conkling, marked "Post 4, U. S. 689," standing in a mound of stones. I was then making a survey of the 20th Century lode, and at that time set the corners marking this claim. Corner No. 4 of the 20th Century as placed by me was identical with corner 4, the southwest corner of the Conkling.

In June, 1907, I was engaged in making a location or survey of the San Pedro claim. At that time I found post No. 4 of the Conkling had been knocked out, but I found the old mound of stones in the same place that I had found it at the corner before. The post was right alongside of a road and had been knocked down from travel, I suppose. The corner of the San Pedro as surveyed by me was practically coincident with the southwest corner, or post 4 of the Conkling. They are a foot or two apart.

In September, 1908, I was at that corner and found there the mound of stones for corner No. 4 but there was no post there. I found the remains of an old mound. The San Pedro post was standing where I had originally placed it.

The patent call marked in black on Exhibit B on the westerly end line of the Conkling is south 21° 8' east 600 feet, and, as I make it, marked in red, it is south 21° 12' and 30" east 600 feet.

J. Fewson Smith made a survey of the Arctic mining claim, shown on Exhibit B, in 1908. Post 3 of the Arctic stands practically on the west end line of the Conkling as I have it platted. I saw it there in 1908.

Stipulation.

It was stipulated that there was no dispute between the parties as to the easterly boundaries of the Conkling claim.

Witness, continuing: The 20th Century claim has no longer any existence.

Cross-examination:

This is a mountainous country where these claims are and every winter is covered very deep with snow, and the effect of the snow is necessarily to interfere more or less with the posts and stakes in the ground. Posts as put in by the original surveyor are sometimes removed by the action of the snow, and in some portions this is quite frequent. Cattle and sheep also grazing about the country have some effect in disturbing these monuments and posts, so that it is

a usual thing to have disturbances among the posts in that region.

85 If I am sent out by my employer to survey a claim and find the original posts at a corner have been removed, it is my practice to put one in. It is not my practice to re-establish corners, unless I have bearing trees or some natural object to re-establish it from, but I do not say that I have never done it. That has been done by surveyors in surveying a claim to put in a post where the surveyor estimates the corner to have been, and I have done it and have known other surveyors to do it. When this is done the post is marked as the original post was marked sometimes. I have done it when I believed I was at the correct point. There are posts and have been posts through this mountain district that are marked as the original posts put in by the official surveyor that are not the posts which the original surveyor in fact put there. I know this to be the fact in some instances. In drawing this map, Exhibit B, I placed the west end line of the Nero not according to the field notes of that claim, but according to the field notes of other claims, and I moved the west end line of the Nero claim farther east than the field notes of the claim would place it, if I were fixing it with reference to the Boss west corner. I did that because I had the southwest corner of the Hope, with the bearing trees of the Pirate King, which were represented to be identical with the Nero, and I established it from that southwest corner of the Nero, and not from the field notes. My bearing trees were the bearing trees called by the Pirate King field notes, and I found an old stake standing in that mound.

In 1908 I was at the northwest corner of the Conkling as I have it platted. The field notes of the Conkling called for two bearing trees. As I have platted the northwest corner it does not correspond with the course and distance that the field notes called for for either of those bearing trees. If I take the course and distance from one of those bearing trees according to the field notes of the Conkling, the corner post would be about 13 feet southerly from where I have marked it upon the map. I have marked the place with a pencil circle with a large "A" pointing to it. If I take the other bearing tree and take the course and distance according to the field notes, it would place the corner northwesterly from where I have put it on the map approximately at the dot in the letter "i" in the word "daylight," which would be about 31 feet northwesterly and less than 20 feet west of the line. It is utterly impossible for any surveyor to locate that corner from those bearing trees with the field notes as to the direction.

In 1901 I was surveying for the 20th Century and found a post in a mound of stones marked "P. 4-689." There was not any bearing tree called for in the field notes for that post. There were plenty of available bearing trees around that corner, and I found one
86 for my survey and utilized it in my survey of the 20th Century. When in my testimony I speak of finding the original posts I mean that I found the posts that I assumed from evidence satisfactory to myself to be the original posts, excepting in cases where

I myself made the original survey. It was a matter of judgment with me that those were the original posts.

Redirect examination:

If I lay my ruler on the west end line of the Conkling as platted on Exhibit B, I find the corners which I have designa-ed in my answers to questions on cross-examination to be $8\frac{1}{2}$ feet and $16\frac{1}{2}$ feet respectively, westerly of the line, a line projected. Taking the calls in the field notes of the Conkling for those two bearing trees, it would be absolutely impossible to locate the northwest corner of the claim therefrom. The two calls do not check and you have two posts, if you take the tree. Evidently the corner would be between those two trees, but, taking the courses and distances called for in the field notes, you couldn't locate the northwest corner. The maximum error would be 15 feet, as far as the westerly line is concerned. In determining the particular point at which I should have and did plat that corner, I found an old stake in a mound of stones, marked "U. S. 580, P-3." That stake I was not sure of being the original stake. It did not answer the exact description as to the mound of stones there. It was a Pirate King stake, and alongside of it on the ground a hewn post, marked "U. S. 689." This was not standing in the mound. It was this mound which I selected as the particular point for this patent corner. It agreed so closely with my position of the southwest corner that I accepted it.

Recross-examination:

Standing about near the southwest corner of the Conkling as I have platted it there are a good many balsam trees; some of them are good sized trees, showing that they have been there a good while. Those are the ones I spoke of as being available for bearing trees. The larger ones are found maybe 90 feet away, but that is within available distance to be used as bearing trees.

J. FEWSON SMITH testified as follows:

I am a mining engineer and have followed that calling for 20 or 25 years, principally in this state. I made a survey of a mining claim at Park City called the Arctic. The survey was completed November 3, 1897. I have examined Exhibit B and find two corners of the Arctic platted on the map. Post 3 is indicated by the
87 words "P. 3-3502." In making that survey I found the northwest corner of the Conkling claim, but I have no recollection as to whether I found the southwest corner or not. At the time I made the survey I found, as designating the northwest corner of the Conkling, a post in place. My notes of survey merely state that I tied to that corner but it does not describe the post. My notes of survey show as follows: "Corner No. 3, a pine post 4 feet long, 4 inches square, set 18 inches in the ground and surrounded by a substantial mound of stones. I marked same 3-3502. A X on a pine tree, 8 inches in diameter, bears south $62^{\circ} 30'$ west 41.0 feet. I

marked the tree 3-3502 B. T. Corner No. 3 of lot No. 689 Conkling lode bears north $21^{\circ} 9'$ west 132.2 feet."

"This corner No. 3 is on line 3-4 lot 689, Conkling lode. Corner No. 4, lot 275, Bruser lode, bears south $67^{\circ} 08'$ west 552.4 feet."

In my field notes I say that corner No. 3 of the Arctic is on the line 3-4 of the Conkling. I do not remember how I would try to determine that. I think first I determined it was on the line, because I placed it there, either according to the official record, or because it was on the line between the two posts. I am unable to say which at this time. I determined the northwest corner of the Conkling, to which post No. 3 of the Arctic was tied, by the fact that near the post were standing, agreeing in general to the description and location in corrected relation, two large trees which are marked as bearing trees to that corner. I had a copy of the official survey of the Conkling claim with me and I used that in determining that this post was either rightly placed or very close to it. It had all the marks which the field notes called for. I found the bearing trees called for in the official notes of the Conkling, and I made measurements to check the position.

Cross-examination:

The paper which I have read from here is not my original notes. I am unable to bring the originals, because there was a fire in the office of Brown and Brooks which destroyed the notes and all things of that kind. In making this survey October 29 to November 3, 1897, it is my recollection that there was one post containing the patent number at the northwest corner of the Conkling, and I think there were one or two smaller ones in this ground. The posts were not vertical. That was the reason I made some checkings to the bearing trees. I satisfied myself that the corner was correct with relation to the pine and balsam called for by the Conkling field notes.

88 I did not rely upon the posts as fixing the corner. I felt it had to be checked in some way. So far as my observation went of the post, I wanted to support the proposition to make sure; so I ran the courses and distances to these bearing trees, to verify my ideas as to the correctness of the post at this point to my satisfaction. I triangulated the line down to the southwest corner and tied together along the line to the post. I am very sure of that, and whether I found it or not I cannot state; I have no notes upon that. I don't know how far I followed the course to find that other corner. I certainly would go 600 feet to find the post. I cannot state just what I did find there, because I established one post I was sure was absolutely right, and as to the other, if it was missing—I might have found a mound of stones, but have no recollection of it. These posts are frequently obliterated by the action of the elements and by cattle and sheep that graze there. It is a very steep incline where these claims are, probably 30 degrees, and the snow falls heavy every winter, and the movements of the snow sometimes obliterate the posts. I have never myself replaced a post which has been obliterated or removed, excepting to establish a post of my own survey iden-

tical with some other post. I do not know that it has ever been done by other surveyors. The posts I found standing were protected by underbrush, and if they were not torn out you could get a fairly permanent post with brush around it. I would not say that around the western line of the Conkling, where I was surveying for the Arctic, it was perfectly feasible to preserve permanent monuments. Probably a monument put in the neighborhood of the west line of the Conkling would be as permanent as monuments generally throughout that district and around there. In this particular survey for the Arctic claim I did say "beginning at corner No. 1, which I did not set because the post could not be made permanent on account of snow slides. I did not think there was any chance of permanency of the post at that point. And at corner No. 2 of the Arctic I said in my notes "corner No. 2, which I did not set because the post would be exposed to violent snow slides and could not be made permanent." In explanation I call attention to the contour, which shows the actual slope, and I would like to add to that that there is a very high mountain, swept clean of all timber, on the west end of the Arctic, which would make it an impossibility to maintain the posts upon the slope. The slope itself is not only clear of all brush, but very much steeper than the wooded side on which the Conkling stood. The west end line of the Conkling, as shown upon this map, Exhibit B, is wooded. I would say there is underbrush, short brush, some timber and a great growth of brush. As you run down toward the southwestern corner of the Conkling there are very heavy timbers. The northwest corner of the Conkling stands approximately close to a ridge and then the mountain or mountains are to the west and the wood runs along by the sides of the claim.

Redirect examination:

Since my survey of the Arctic claim I was on the ground in the vicinity of the northwest corner of the Conkling. It was with Mr. Brooks in 1909, I believe. We came at that time to post 3 of the Arctic as I had set it at the time I made the survey. I can say that we found this post in its proper position. I went to the bearing tree called for in the official notes of the survey of the Conkling in connection with the northwest corner. I found the tree still standing there, marked as called for in the official notes.

The official field notes of the Arctic claim were offered and received in evidence subject to the objection of counsel for plaintiff as to the competency, relevancy and materiality of the same, as hereinbefore noted.

Recross-examination:

It was in 1909 that I was up there with Mr. Brooks at the northwest corner of the Conkling and found the post there. As nearly as I could remember the post was there, set in the mound as it was when I was there before. My recollection is it was adjusted. It

was standing near vertical and it was about that in 1909 when we found it. It was upright in the ground in the mound of stones.

Redirect examination:

I made no notes of the surface conditions. I took notes of the official surveys and I just compared them, made the comparison. I found posts standing and took notes to know if they checked absolutely.

CHARLES P. BROOKS, recalled.

After I made my survey of the 20th Century, a short time after that, I do not remember just how long, work was started on the Belmont Mining Company's ground where the buildings were built and the shaft was started. The road ran up to the shaft house, running right close to the post at the southwest corner of the Conkling. This road was traveled considerably.

190 WALTER H. WILEY testified as follows:

I reside at Los Angeles; am a mining engineer; graduated from the Golden School of Mines in 1883, and have followed my profession continuously, first as a deputy mineral surveyor and assayer, and afterwards as mining engineer. During the latter months of the year 1911 I was in Park City, in company with Brooks and others, and was over the surface of the claims represented on the map, Exhibit B, and particularly the Conkling. It was in October, 1911 I was there with Brooks and Blood, and had pointed out to me what Mr. Brooks claimed to be the northwest corner of the Conkling. My attention was called to one or more bearing trees that were called for in the official notes of the Conkling claim. I went to these and observed the markings upon them. I saw a copy of the field notes of the Conkling and observed the calls in these notes for these two bearing trees. I cut out a section of the pine tree and have it with me, and also took some photographs of the trees which illustrate the position. The photographs I now produce. This brown portion at the upper end indicates a portion of the block which was blazed on the tree. In other words it had been blazed under this brown portion. Since then this growth has occurred: And the annual rings shown at the end of the block show how long ago it was blazed. Counting these rings on the end of the block from the middle out to the edge of the bark, there can be counted about 20 annual rings, showing that this blaze was made at least that number of years ago. This marking on the tree occurring on this side of the bark were partly over-grown. As I remember one was the figure 3, half of which was entirely under this portion of the overgrowth, and the other half of which was visible outside of it. In other words, the blazing on the tree had been partly over-grown outside of it. In other words, the blazing on the tree had been partly over-grown to the extent as indicated

by this ridge on this side of the block, and presumably another similar ridge on the other side corresponding to this one.

The piece of wood was offered and admitted in evidence, marked "Ex. p, J. W. C."

There was also offered and received in evidence three photographs taken by the witness, marked Exhibits "Q," "R," and "S."

Witness, continuing: Exhibit Q is of a tree marked on the photograph, "Corner 3 of the Conkling, October 18, 1911." This shows in the lower right hand portion a post which is there today, back of which a man is sitting in order to make the post plain.

91 The dead tree shown in a portion of the photograph is the balsam, a tree which is one of the witness trees, while the other witness tree would be back and not shown in the picture. The dead tree or balsam, with the details of the marking which can be plainly seen on close inspection, is shown by this picture. Exhibit R shows a tree 18 inches in diameter. This shows the mark very distinctly on close inspection, because it is well lighted and the sun shining brightly upon it. Exhibit S shows a tree 18 inches in diameter. It shows the blaze, but as the tree is in shadow and the focus not good, it does not show as clearly as the other, which is the tree from which the block referred to was taken, and the block was cut out after the photograph was taken.

Counsel for defendant then offered in evidence patent from the United States to the Belmont Mining Company for Custer No. 2 and Silver Hill No. 4 mining claims. This patent is in the usual form and purports to convey, with other premises, the Custer No. 2, Silver Hill No. 4, and other claims designated as U. S. lot No. 4850, substantially as the same are shown upon the defendant's map, Exhibit A, dated and issued June 2, 1904.

There was also offered and received in evidence deed from the Belmont Mining Company to Thomas Kearns, Trustee, conveying Custer No. 2 and Silver Hill No. 4, and other mining claims, dated April 12, 1907, and also a deed from Thomas Kearns and wife to the Silver King Coalition Mines Company, dated June 12, 1907, conveying the Silver Hill No. 4 and Custer No. 2 mining claims.

There was also offered and received in evidence, subject to the objection of plaintiff's counsel, and to be ruled on by the court in connection with the other testimony, as hereinbefore stated, certified copies of the field notes of the 20th Century lode mining claim and San Pedro lode mining claim. The notes of survey of the 20th Century lode mining claim show the same to have been surveyed by Charles P. Brooks, U. S. Mineral Surveyor, August 27, 1901. A portion of said notes is as follows: "142.9 feet to corner No. 4, identical with a corner of the location and with corner No. 4, lot No. 689 of the Conkling A hewn pine post, 4 inches square, 4 feet long, set 18 inches in the ground, with mound of earth and stone. Scribed 4-4648. Whence a pine tree, 8 inches in diameter bears south 84° 15' west 75.8 feet distant, blazed and scribed B. T. 4-4648." The notes of survey of the San Pedro, mineral survey No. 6029, made September

25, 1909, by Charles P. Brooks, mineral surveyor, contain the following:

92 "There was no evidence of corner No. 1, lot No. 689, Conkling lode. I could find no evidence of corners No. 1 and 4. On lot No. 689, Conkling lode, is shown, according to my notes of survey No. 4648, 20th Century lode, surveyed at a time when the corners of lot No. 689 were standing. * * * Survey No. 3502, Arctic lode, Corner No. 3 was a hewn quaking-aspen post, 4 inches square, 5 feet long lying in a mound of stones, scribbled 3-3502. I reset it in the mound. Corner No. 4 was not found. Survey No. 4648—20th Century lode. Corners No. 3 and 4 were not found. Their positions were determined from the official records of survey No. 4648."

ROBERT GORLINSKI testified as follows:

I am a mining engineer and U. S. deputy mineral surveyor, fifty years old, residing at Salt Lake City. Have practiced my profession for the past 24 years. I am familiar with the country where the Silver King properties are located, as shown upon Exhibit B, and am familiar with the Conkling, lot 689, and the Custer No. 2 and the Silver Hill No. 4. I surveyed the Custer No. 2 and the Silver Hill No. 4, shown at the south of the Conkling lode; made the official survey June 5, 1902. Surveyed the Silver Hill and other claims at the same time. It was a group survey. I erected the post at the southwest corner of the Custer No. 2. I made ties from that post to a post of the Conkling, 689. The courses and distances are in my official notes. I have my original notes.

The testimony of this witness was received under the objection of counsel for the plaintiff, heretofore made to similar testimony, and was received by the court and ruled upon in the same manner.

Witness, continuing: From corner No. 4, the southwest corner of the Custer No. 2, corner No. 4 of lot 689, Conkling lode, and survey No. 4648, 20th Century, lode, respectively, bears north $76^{\circ} 59'$ east 558.3 feet. I measured this distance correctly at the time I made the survey and correctly took the course and have correctly reported it. Upon this map, Exhibit B, the distance is correct, 558.5. The course as given on the map is also correct. I actually went to the point referred to in my notes as the southwest corner of the Conkling, 689, and northwest corner of the 20th Century. I was there first in the fall of 1901, and was there in May, 1902 and June, 1902. When I was there first there was snow upon the ground. I did not then find post 4 of the Conkling. I found a post marked 4-4648. This was the northwest corner post of the 20th Century. At that time I sought to verify the location of the southwest corner of the Conkling by finding another post of the Conkling claim. I went to
93 the northwest corner of the Conkling, where I found post 3. I went there in June, 1902, when I made that group survey, and when I was fixing the southwest corner of the Custer No. 2. I

then found at the northwest corner of the Conkling a post firmly set in the ground, marked "U. S. 580-P-3," and lying down right by the side of it a post marked "U. S. 689-3." There was a mound of stone around the one that was down. The one that was standing was U. S. 580-P-3. It was standing in a mound of stones. The other was lying on the ground by the side of it. It was marked "U. S. 689-P-3." In going from the southwest corner of the Custer to the northwest corner of the Conkling I determined what course to take from the field notes of the Conkling. I first set my instrument on 4-4648 and sighted upon the patent call; took the line given in the official notes, and that took me to the northwest corner. I run in that direction and then I surveyed afterwards and went right to it. I surveyed a very careful transit line, from which I deduced the direct course and distance. I found the course and distance of the direct line between U. S. 689-P-3 as found by me, and 4-4648, 20th Century, to be south $21^{\circ} 16' 58''$ east 598.94 feet. From the line on the map, Exhibit B, it varies 1.6 feet in distance and about 5 minutes in course. When I was at the northwest corner of the Conkling I found two bearing trees there. These two trees bore from the stake, U. S. 580-3, the southwest corner of the Pirate King, as follows: "A red pine tree bears north $19^{\circ} 10'$ east 22 feet. I connected with it. The tree was marked "U. S. 689-P-3 B. T." The distance of that tree from the post that I found standing in the mound of stone was 22 feet, and from this post 580-P-3 there is another tree which bears south $40^{\circ} 10'$ west 26.5 feet. I did not take the bearing of the tree itself, but took the average of the blaze. That was marked for the two claims, U. S. lot 580 and U. S. lot 689. It was marked for both Pirate King and Conkling. Afterwards I was in the vicinity of these bearing trees again, May 16, 1908. I observed the same corner and the same tree. In running from corner No. 2 of the Custer No. 2 I run south 66 degrees west and 183.3 feet, intersecting line 3-4, Lot 689 Conkling lode, at North 21° 09 minutes west, 414.7 feet from corner No. 4. I also made a survey in which I returned corner No. 2 of the Silver Hill No. 4 as identical with corner No. 4 of the Custer No. 2.

There was then offered and received in evidence, subject to the objection of counsel for plaintiff heretofore noted, and ruling reserved, as hereinbefore noted, the official notes of the survey of the Custer No. 2 and Silver Hill No. 4, surveyed by the witness Gorlinski June 5 to June 14, 1902.

94 Cross-examination:

In 1902, when I was up at what is spoken of as the northwest corner of the Conkling, the post that was marked as post 3 of the Conkling was not standing in a mound of stones at all. It was lying upon the ground. I examined. I examined it. It is hard to say whether it had ever been in the ground or not. It looked like an old post. I did not examine it to see whether it bore evidence as to whether it had ever been put in the ground or not. I found it there lying on the ground. That is all I know of it. I found it there in

1902. I found two bearing trees in that neighborhood. I had with me the plat of the Conkling Survey. It showed the length of the Conkling claim to be 1,500 feet. I did not take that plat to try to determine where the northwest corner was by measuring 1,500 feet from corner No. 2, but I wish to say that a part of the patent survey of the Conkling is that the Conkling post is identical with the Pirate King post. I found the Pirate King Post in the ground; that is a positive fact. Also the field notes say post 3 of the Conkling and post 4 of the Pirate King are on line. I did not measure 1,500 feet from post No. 2 of the Conkling along the course given in the field notes. I found the post lying upon the ground and this bearing tree marked as I have described. The course and distance of the tree from the post is a different one from that mentioned in the notes of survey. So also with respect to the other tree. Neither of the trees corresponded for courses and distances from the point where the post was to the calls in the patent survey. In going to post No. 4 of the Conkling I ran a line where I assumed corner No. 3 to be, where the post was lying upon the ground. I did not find a post at corner No. 4 of the Conkling. When I speak of corner No. 4 of the Conkling claim and the corner as I had it and tied to it, I speak of the corner as I ran it from my survey, and not a corner where I found any post evidencing it. I found no post marked "U. S. 582-4." In establishing or assuming corner No. 4 of the Conkling, one of the things that influenced me was the fact that there was another post there, a 20th Century post, established by Mr. Brooks, and which he had identified with corner No. 4 of the Conkling. I had been over this ground in 1901 and had also been there in 1899 and had made observations for posts. Prior to 1902, in 1901 and 1900, I did not see any post there at that point marked post 4 of the Conkling. I have never seen any post marked "689-P.4."

R. H. BROWN, a witness for the defendant, testified as follows:

95 I am a mining engineer and have followed that profession many years. I am familiar with the claims, or some of them represented on defendant's map, Exhibit B, especially with the claim shown thereon as the Hope mining claim. The field notes of that claim, introduced in evidence and marked Exhibit N, read as follows:

"Hope Lode: Variation 17 20' East. Commencing at the discovery of the claim, where I set a balsam post 6 feet long, 4 by 3 inches square, marked "U. S. 260-D. S." for discovery stake; from which a burnt pine stump 30 inches in diameter bears South 85 45' West 60 feet distant; a shaft 12 feet deep bears South 48 45' West 151 feet distant."

I have made a survey of portions of the Hope claim within the last year or two and I found the discovery point called for in the field notes, and also ascertained the course and distance from the discovery point to the shaft mentioned in the field notes, and found the shaft. I found it to be practically as given in the field notes.

I found it to be practically as you have read from the field notes. I can give it to you exactly as I found it; South 49 24' West 151 feet, and the difference in the course and distance can be figured very easily. My course is South 49 24' West 151 feet from the discovery to the shaft. The distance as I found it recently is the same as the distance given in the field notes. The distance in course as I found it recently and as given in the field notes is easily accounted for, a few minutes, for the simple reason that I may not have sighted upon the particular part of the shaft that was sighted on when the original course was taken, but the difference is only 39 minutes.

CHARLES P. BROOKS, recalled, testified as follows:

[Q.] The circle on the map, Exhibit B, beneath which is written "Post 4 feet by 4 inches by 3 inches," and scribed "Corner 3 Conkling newly set" is intended to indicate a post found upon the ground there which was newly set by Mr. Brown in 1910. I saw this post sometime in the year 1911. I found no evidence whatever in the vicinity of that post by way of a mound or anything else, to indicate that any old post had ever been there. It would be the north-west corner of the Conkling, extending 135½ feet farther to the west. It is a new post. The other circle, beneath which is written "Sawed pine 4 inches by 4 inches, 2½ feet high, scribed corner 4 Conkling, apparently recently set" indicates a post which I first saw when I saw the other one, since this suit began. It appeared 96 to be a new post recently put in. I could not find any evidence of any old monument in the vicinity.

Referring to the map, Exhibit A, all the work displayed upon it is platted from notes of survey made by myself, excepting that made from notes of R. H. Brown. I was the mining engineer of the Crescent Mining Company at the time when the work shown upon the map as the Aetna tunnel was driven and the Aetna west drift and the drift in red marked "Mike's drift." The surveys were made by myself with Mr. Brown. I think I surveyed the greater part of the levels marked "Level No. 1" and "Level No. 2," but part of it was surveyed by Mr. Brown. I have a list here so that I can state with precision what portion of the old workings of the Crescent were platted from notes made by Brown, my partner, and what from notes of my own. Mr. Stephenson was in charge of the Crescent and had direction of the working at the time Level No. 4 was driven from the Aetna shaft westerly. He has been dead a number of years. The work driven easterly from the shaft was driven by the Hanauer Mining Company for some 200 or 300 feet. It was under the direction of Mr. Trewick. A great deal of the working shown on the map, Exhibit A is inaccessible. I have not been able to get into very many of the workings for a good many years. I think the Silver King Company or Silver King Coalition Mines Company took up the working of the 400 level about 1902. I think the last work was done by the Crescent Company about 1892, but there was work done in there in a small way afterwards.

I have my notes of the work made by the Crescent Company, with which I kept up closely at the time they were working. My notes do not always show the dimensions of the stope, but wherever they are colored, with full lines, they are all put in from measurements in the stope, and where they are not put in in full lines they were put on from other outside information. For instance, there is a dotted outline here on the Baskin stope, which shows that that was not put on from any survey. It starts a little west of the Apex cross-cut and follows around northerly to the Baskin stope and goes down to the stope marked 499 on the No. 2 level. There are other stopes in which I have dotted the lines to indicate that they are not put on from actual measurement. The stope lying north of the K-K level No. 1 is marked "Stope and unsurveyed." This was put on from information derived from M. J. Dailey. There are several stopes put on from information given by him. I surveyed the Alliance tunnel and branches therefrom, which is platted on the map. The old Silver King Mining Company drove that portion of the tunnel, which runs through the Conkling mining claim. The difference in elevation between the 400 level of Hanauer tunnel and the Alliance drift is 770 feet vertically. The McKay's cross-cut, which runs southerly from the Alliance drift encountered a fissure in ore. Beyond station 1855 we ran a drift to the east, which is marked with a little broken line with an arrow to it. The fissure was encountered there. If the fissure there encountered continues to the surface and is found in the green working running easterly and westerly from the Constitution tunnel, it would have an average dip of about 55 degrees.

I have in my notes a notation of the dip of the vein at different places in the Crescent working. It has a variable dip. These workings displayed upon the map where these stopes are found to the northerly are in the limestone beds and the variation in the dip is from 8 to 10 degrees up to 20 or 30 degrees in places. These are the levels which were driven while work was being done by the Crescent Company. The dip of the fissure is to the southeast, in an opposite direction from the dip of the bedded country. The elevation points in the Walker and Buckey stope platted from Mr. Brown's survey show that the ore body is dipping to the northwest. I have seen one or more ore bodies lying in the fissure or imbedded in the country. They conform to the limestone beds. I have seen no instance where the ore was not in the fissure where it did not lie conformable in the beds.

Exhibit C-C J. W. C. being a map entitled "Projection on Vertical Plane along course of Crescent fissure vein looking northerly" was introduced in evidence.

Witness, continuing: This map is a projection of the workings of the Crescent mine in what is known as the Crescent fissure. It includes the workings of the Aetna west drift down to the 400 and other workings that run from the Aetna west drift up as far as the Crescent drift, and also to the west, including the workings running from the Alliance tunnel through the Columbia raise and Constitu-

tion tunnel near the surface, and the projection of these workings upon a vertical plane. These lines A-B on the map show where the section of the mine lying between plane A and plane B was projected on the cross-section, which I will produce later. The stopes are shown in blue on the map C-C. Where they are [not] full lines they are put on from actual measurements. Going west from the Aetna west drift there is a stope above the level put on there from actual measurement, and just west of Matson's raise is a stope marked "Stope along raise" also put in from actual measurement. The

98 McGregor stope is also from actual measurement. All the stoping above the Aetna tunnel west drift near raise 2 is from actual measurement, and all of it is in the fissure. I can give the dimensions from my notes. The stope below the Aetna tunnel west drift and above level No. 1 is from actual measurement and is in the fissure. The Baskin stope lying above level No. 2 is put on from actual measurement and is partly in the beds and in the fissure. It extends out in the beds about 100 feet from the fissure. The ore body lies conformable to the beds where it is in the beds. Between stations 680 and 616 on the 400 level those stopes were put in from actual measurement. The ore is found principally in the fissure. I do not remember any of it in the beds at all. I did not take any measurements of any ore in the beds at all. I know nothing about this stope except what Mr. Dailey told me. Above what is marked on this map as "Level No. 3" near Mahoney's Raise, above that is indicated a stope in which is found Station 633 and the words "Stope"—that was put on from actual measurement, and the ore there was in the fissure. In the working marked "Level No. 2," and shown on this section extending westerly from the Apex raise, there are two stopes indicated, one above and one below the level and the words "Stop" found in each of them: These stopes were put on from actual measurement and the ore there was in the fissure.

In the working lying as shown on Exhibit C-C below the Constitution drift northeast, there is a piece of ground marked "Drift," and connected with that is indicated a small stope: That was put on from actual measurement and the ore there was in the fissure.
* * * That stope is approximately 45 feet below the top of bed rock.

The witness then produced Exhibit D-D, a cross-section, which was introduced in evidence.

Witness, continuing: This Exhibit D-D is a section of Crescent Hill in the direction of the dip of the Crescent fissure vein, showing a tracing of the Crescent vein from the Elephant stope to the surface and is a projection of the workings that lie between those two planes on Exhibit C-C marked, the westerly one "Plane A" and the easterly "Plane B." All of the workings shown on Exhibit C-C are projected on the plane of this cross-section. The Elephant stope is designated and colored in pink and lies both below and above what is known as the McKay cross-cut which runs into it. Drift D, drift C, Engine drift, drift E, drift F and level No. 2 to the K-K incline run off from the Columbia raise and are marked in pink. These maps are

all on the same scale. I have another cross-section, which is produced and marked Exhibit F-F. It is a cross-section of the
 99 No. 6 raise from level No. 3 to level No. 2 and shows the

Kass cross-cut and shows a cross-section of the Baskin stope as it went out to the northwest in these beds of lime. It shows the ore in the fissure connecting with the ore in the bed in this part; we called it ore in the bed, and between the two is a space marked "quartz" that is barren country. I made a sketch of that in my note book at the time the work was going on in the Baskin stope. Section E on this map is intended to show ore in the beds and ore in the fissure. Section H shows ore in the beds and then ore is shown between level No. 1 above and cross-cut No. 3. This is in the beds connected with the Baskin stope. Section J represents actual ore bodies. The Baskin stope ore body is in the beds.

Witness produces a map, identified as "Original Crescent map." It is marked Exhibit G-G and placed in evidence.

Witness, continuing: The workings on this map have been surveyed by me or my firm and I have the notes of them. The general dip of the beds containing the Crescent ore body is a north northwesterly direction—a little west of north, and the general dip from the extreme northwest lower ore bodies to the extreme southeasterly would be about 15 degrees. It would be, roughly, from the point marked "Square set stope" up to the stope along the Buckey tunnel, up 1,000 feet, giving a difference in elevation of 275 feet, which would be about 15 degrees dip. That would approximate the general dip of the lime beds as well. There is a tunnel called Rebellion lower tunnel, which is later named the Aetna tunnel. The ore bodies do not extend farther in a northeasterly direction, I think, because they go to the surface at that point, on account of the hill being very steep there. They do go to the surface in some places, apparently on its dip. The last work I placed on the Crescent map, so far as I know, was October 5, 1892. The uppermost or southerly workings on the Crescent mine is in the Walker and Buckey tunnel. The stope may go a little above that tunnel in places. I don't remember. Those are the highest workings I now recall. I do not know how much farther the Baskin stope extended down through subsequent workings after the time I went in there and made my observations. Referring to Exhibit A, the pink colored streak which is bounded upon its southerly side by a dotted line was put upon the map under the instructions of Mr. Wiley. It is not an actual survey. The line I understand was fixed by physical points along the surface which gave it its location. I made no geological observations to determine it. I am not responsible for any part of the line. So far as my observations go it would conform approximately with the point where the hanging wall
 100 of the fissure would come to the surface in places. It forms in rough approximation, a straight line from the southerly line of the Monroe Doctrine to the Boss shaft or Boss tunnel, and represents approximately where it outcrops on the bed rock. Referring to Exhibit D-D the pinkish coloring which is interpolated be-

tween the foot wall dots and the hanging wall dots is intended to represent the vein and is put on there from Mr. Wiley's notes. The plane of the projection is shown on the map by a dotted and broken line, and the two lines, Plane A and Plane B are at right angles to that line.

Referring to Exhibit D-D, that part of it which is on the horizontal line 2,000, the dotted line which seems to limit the limestone in the foot wall, represents an ideal line, drawn from one known point to another, and the distance between these two vertical lines is indicated by the elevation lines and is there indicated as 250 feet vertically. In like manner the dotted red line delineating the foot wall of the limestone is ideal, between the top of the little raise near the 2300 line and on up to the drift just below the 2400 line. On Exhibit D-D, the projection, the winze running down from the line which is marked "McKay's cross-cut from Alliance A." According to Exhibit D-D the Engine drift runs out into the lime hanging country. I did not place either wall of the fissure at that point. It was put there by Mr. Wiley. At the top of the Columbia raise, or where the line of workings meets the surface on the Exhibit D-D there is an indication of wash on the map. This was put on from Mr. Wiley's measurements, and would be approximately the depth of the wash, according to my observation. This entire country upon the northerly slope of Pinyon ridge, extending from a point about the Buckeye stoep, say in a general westerly direction beyond the westerly side line of the Monroe Doctrine, is all country covered with wash, from 22 or 23 feet to 40 feet in depth, and may be deeper; 40 feet is the greatest depth that I measured. On the plan map, Exhibit A, the work which upon Exhibit D-D is marked as a raise above and a winze below the Apex tunnel level, is shown as the working on either side of station 2739. This winze is not accessible to its extreme depth. It is caved at the bottom. I measured it as it was sunk through the caved portion. I understood it was an old winze run by the Apex Company and partially cleaned out by the Silver King. The raise is accessible. On the K-K level No. 1 running southwesterly, there is marked at the extreme end a bulkhead. My recollection is this bulkhead was put in there to keep the water from running back. It renders the drift inaccessible at the present time. The drift from station 669, where the raise is shown, is all inaccessible at the present time. One cannot go in K-K level No. 1 southwesterly of station 669 and cannot get up the raise which is at that place.

I recognize a lithographed map which forms a part of the Silver King Mining Company's report. It is a correct copy of a map made from surveys by me.

Map introduced in evidence, marked Exhibit H-H.

Witness continuing: Exhibit H-H embodies the work upon the Crescent Hill, which is included within my plan map A. There may be some little details that are carried out better on the larger

map. It includes the same territory. And going to the north-easterly it includes the workings of the Silver King and includes the Alliance tunnel to its portal and the Hanauer tunnel to its portal, and certain cross-cuts coming across from the Alliance Tunnel through the workings of the Silver King Mining Company. Generally speaking, the lime beds that are in the territory covered by the maps, Exhibit A and Exhibit H-H, have about the same dip as the lime beds throughout this portion of the territory, which is called the Silver King Property. In the Silver King mine the occurrences of ore in the lime beds are conformable with dip of the beds. The production of ore from the Silver King workings has been very large indeed. Exhibit H-H is on a reduced scale and is probably a little greater than 400 feet to the inch.

JAMES B. KEARNS, a witness produced by the defendant, testified as follows:

I am a miner and live at Park City. Have followed mining 35 or 36 years; am past 51. I have been engaged in mining in Park City about 28 years and am now in the employ of the Silver King Coalition Mines Company. I have last been employed about nine months. I have worked at different times for the company and for the old Silver King Company prior to that. Was in the employ of the Crescent Mining Company about 1887 or 1888. Was first employed as a miner. I was a shift boss there for a year or two. Continued working about three years as a shift boss. No. 2 drift had been run out about 350 or 400 feet from the shaft when I went there as shift boss, and while I was there it was driven about 100 or 150 feet, to the Apex line. We drove it about 400 feet. It went about 50 or 75 feet from the Apex winze. This level is driven on vein matter on the fissure. Vein matter is quartz, ore porphyry, lime, all crushed up. We had carbonate and galena ore in the level

as it was driven along in the vein as far as we drove it.
102 There was ore all the way along that level. We could recognize it by the eye without having an assay made. There was some ore saved, sent to the mill, and shipped. After we had run No. 2 level we came back and raised on the ore up the No. 2 chute to the Baskin stope. This chute started in on the level in ore. Up about 15 or 20 feet we encountered a flat ore body. The ore we took out of chute No. 2 was carbonate ore. It was all shipping ore. It was in the fissure. I put four raises or chutes up from No. 2 level up into the ore body; No. 1, No. 2, No. 3 and No. 4. Chute No. 3 was put up while I was there, and chute No. 4. Do not know about chute No. 5. All these chutes went up in ore in the fissure. It was all shipping ore, first class ore. It was saved and marketed. The flat ore body, which we got up 15 or 20 feet in the chute, extends about 100 to 125 feet out in the beds. It was about six feet thick and came down to as low as a foot thick before it gave out in the bottom. It was dipping along on the lime beds. The ore in the beds here commingled and connected with the ore in the fissure. We followed it from the fissure right out into the

lime beds at the west end, and along the level in an easterly direction we stoped it out about 250 feet. We had lime above the flat ore body, barren lime, and lime beneath it, and lime at the northerly terminus of the ore body and at the east end of it. I did not see any indications of fissuring in the flat stope. The ore we took out of the flat stope was merchantable ore. It cut off quickly in the lime.

The No. 1 level was connected with the Apex workings. We drove that probably about 200 feet. That went out to the Apex boundary. There was no winze there when I was there. It was driven farther west than the No. 2 level. The appearance of the vein throughout that portion of the level was quartz, lime, mud, talc and ore. There was no shipping ore that I could see. There was a small streak now and then of good ore, but not in sufficient quantity to ship. It was nearly all the way through low grade ore, which I could recognize by the eye. It carried values. We connected No. 1 level with the winze from the Aetna west drift. It went up in vein matter in the fissure; part of it was ore. A drift from No. 3 level was started while I was shift boss and run a hundred feet west of the shaft in vein matter and ore, quartz, porphyry and lime in the fissure. I have within the past few weeks been through what is shown on the map as No. 4 or Hanauer tunnel level. I have been all the way through from one end to the other, as far as accessible, and through the Reimer raise, all the way over to the Columbia raise. Hans Johnson was with me, and Mr. Wiley and

103 Mr. Blood. I had charge of the samples taken. They were delivered to Mr. Wiley the first time and to Mr. Blood the second time. Wiley took charge of those taken when I went through with him. We could see the walls through the lagging at places, and I examined the level as far as we traveled through it carefully. The level is driven on a well-defined vein or fissure. In my opinion high grade or shipping ore is exposed at places.

I have been up the line of workings shown upon the map as the Columbia raise and up the Reimer's raise, and the Mahoney raise and the Johnson raise and up in the Constitution drift. The Columbia raise starts in a vein and continues up the vein 550 or 600 feet. I did not make measurements. And then I went into the Custer drift. The face of that drift is in ore,—milling and shipping ore. Went into drift C, which is called the Engine drift. This was in ore—shipping and milling ore in the northerly face. Was also in drift E. The northerly face of that is in ore, shipping and milling ore. Was in drift F. That is in shipping and milling ore. Was in a piece of work running out from the Columbia raise westerly, colored in red, from station 676-C. That work is driven in lime. I was not able to go beyond that westerly. Reimer's raise is timbered closely. It is very difficult to see anything there in the wall. Level No. 3 from the Apex raise is driven in vein matter—ore and porphyry, talc and the like, and on low grade ore. The Mahoney raise is lagged and timbered. Some places you can see the walls and some you cannot. Where I could observe the walls I saw vein matter the same as I have heretofore explained it. About 110 feet up that I

found low grade ore, galena, iron and zinc, and also saw what I judged to be ore on the walls in several other places. One was by the Johnson winze up about six or eight feet, between a point on Johnson's winze and Mahoney's raise. I went up the Johnson raise, which is timbered and lagged, and could see the walls through the openings in places. The raise mostly runs up the fissure in broken up vein matter; did not see any ore there. The work shown on Exhibit A as running westerly from station 2850 E is driven in vein matter. I went up from this last piece of work to its connection with the Constitution drift or tunnel. This goes up in the vein. Went from station 2850-C out northeasterly to the face. It is driven on the vein. Saw a small stope connected with that line of work. Was in the drift running westerly from the Apex tunnel, starting at station 2737. This goes out in the vein in the fissure. There is low grade ore there. Was in the other drift running westerly from the Apex tunnel, from station 2737½. That is driven on the fissure, and I saw there what is in my judgment low grade ore. Also 104 was in the drift running easterly from this point. This was run on the vein in the fissure. Have been through the working designated on Exhibit A as Constitution west drift, Constitution tunnel and Constitution east drift. It exposes vein matter all the way through, quartz, lime, pyrites, iron, all mixed up together. Was there at different times when that work was being done. The roof in many places was driven right in the wash, and the material of the roof was held up with lagging driven right in under it. I observed some porphyry. It is mixed up through the drift. It is not exposed continuously. I assisted in taking samples along this west drift, the Constitution tunnel and the east drift. Mr. Blood and Mr. Johnson were along; and I took samples in company with Mr. Wiley. I picked up the samples and saw that Mr. Blood sealed them when we delivered them to him. I assisted Mr. Gitsch and Mr. Wiley in taking samples in other workings.

ARTHUR G. DALLEY, a witness produced in behalf of the defendant, a competent chemist and assayer, testified that he was in the employ of the Silver King Coalition Mines Company. Was acquainted with Hans Johnson and that he assayed a number of samples which were delivered to him by Johnson.

These assays were reported by him upon certificates of assays which were marked and received in evidence as Exhibits E, E-1 and E, E-2 J. W. C.

CHARLES S. COWAN, a witness produced and examined on [behalf] of the defendant, testified that he was an assayer, residing at Salt Lake City, and that Mr. David Keith had delivered to him a number of samples of rock on January 10, 1912, to the number of 52, which were assayed by him.

The assay certificates were produced and marked and received in evidence as Exhibits J, J-1, J, J-2 and J, J-3.

Witness, continuing: On or about January 24th I also received through the express office another lot of rock to be assayed. The samples were in a leather hand-bag. It was delivered to me by Mr. Blood. I examined these and the result is embraced in Exhibit K. K. J. W. C.

This exhibit was marked and received in evidence.

M. J. DAILEY, a witness produced on behalf of the defendant, testified as follows: I live at Salt Lake City. My business is mining. I was at one time in the employ of the Silver King Mining Company and was with the Kearns-Keith Company, and subsequently
105 with the Silver King Coalition Mines Company. Am not now employed by the latter. My employment ceased about a year and a half ago. I was superintendent at the Kearns-Keith in 1902. I am somewhat familiar with the maps in evidence. On Exhibit A some of the workings were done by the K-K company and some by the old Silver King Company. The latter company put down a shaft which is not shown on this map. A part of the Alliance tunnel was done by the old Silver King Company. Some of the work in No. 4 level or Hanauer tunnel was done under me. I had the level cleaned out for a short distance easterly of the Aetna shaft and for a considerable distance westerly. This was in 1902, and I re-timbered that level in places. I put in new timber along the drift for at least one-half the distance from the Aetna shaft to the face at that time. This drift was driven on the fissure. It was on a fissure vein. The vein here passed in porphyry, crushed quartz, ore and talc. The ore was continuous along the level. I have examined that level from the Aetna shaft westerly as far as one can examine it with the lagging there recently, in company with Wiley and Blood, Gitsch, Kearns and Johnson. Did not myself take any samples. Examined the tunnel on the same level east of the Aetna shaft,—from the tunnel right in to the Aetna shaft. This level is run practically on the vein for about 1,600 or 1,800 feet easterly of the Crescent or Aetna shaft. After I had repaired it I extended the 400 level farther west, about 1,000 or 1,100 feet, southwest of the Aetna or Crescent shaft. I drove it as far as it is shown on this map. It was driven in the Crescent fissure the greater portion of the distance. I can point out where it left the fissure on Exhibit A, at about station 614, and we got into the fissure at about 684. It left the fissure about station 617 and got back in the fissure about 620. It would drop back in the foot wall at different times and go into the fissure again. From 627 on it was in the foot wall the entire distance. In driving the level we encountered high grade ore along about station 2959, as I remember. It was in the fissure where we encountered the ore. We had it to along about station 557. We had no rich ore—no pay ore—west of that on the level. We got pay ore near the Apex raise and it continued on the level westerly for 100 to 150 feet to the station 684. This ore we saved. This ore in the westerly portion was in the fissure. I made raises up from this level. The Apex raise is one. It went up in the Crescent fissure. We had low grade

ore in this raise all the way up above the 400 level as we went up. I encountered a flat ore body that made out into the beds. It joined with the ore in the fissure. There was no difference in the appearance or grade of the ore in the beds than in the fissure. There was shipping ore in the beds. About one-tenth would be shipping ore and the balance would be milling ore. This was in the fissure and in the beds both. At different places and stations in which ore was found making out into the beds its farthest point did not exceed 20 or 25 feet, as I remember it. It was hard to say at all times whether it was bedded deposits or just a swell in the vein or ore. The ore body that lay in the bed would be from 15 to 20 feet down to nothing in thickness. It is hard to make an average. I mined out all the pay ore, the pay milling ore as well as the pay shipping ore. In the roof above the flat ore body we had barren limestone, and the same formation beneath this flat ore body; I did not observe any fissure in the roof in the limestone over it or in the limestone beneath it. The ore that I stoped extended below the 400 level. We stoped it below this level and opened up a bedded deposit, probably 50 feet below the [the] level, as I remember now. Until we got down 50 feet the ore was in the fissure, and then it made out into the beds. There was continuous ore from the stope above the level to the stope below the level. From my memory I gave Mr. Brooks as best I could the size of the stope below the 400 level. I have examined it as platted upon the map, Exhibit A, and the outlines of the stope in my judgment represent approximately the size of that stope below that level. I did what is represented here in blue with a broken line, a narrow stope running easterly from about Station 673 to Station 676 and out somewhere near Station 669. It was a part of the fissure. The work at the westerly end shown here in white, marked "Stope unsurveyed," when I got down that 50 feet or so in the fissure the ore made off into the beds, not to exceed 30 feet greatest thickness, and from that down to nothing practically. The roof of that ore body when it was mined out was barren limestone, and the same formation beneath it. I saw no fissure in the limestone on top of the ore. It extended down as far as the K-K level No. 1. I ran the working marked as K-K Incline. It went down in limestone in the foot wall country. I ran the working that is shown in red from the bottom of the incline around past station 676 and down to 676-A. It was in the foot wall in limestone. I ran westerly from the angle south of station 676 past 677 to the westerly face as shown on the map. This was run on the fissure and we had ore continuously in the drift, with some shipping ore. I ran the K-K level to station 670, past 671 and to its westerly face. That was run on the fissure. I had vein matter and ore continuously and some shipping ore. Also ran the branch of K-K level easterly to station 669-C. It was in the fissure practically the entire distance. I remember a little stope out near the easterly end of the K-K level No. 1, easterly of station 2714. That stoping was in the fissure. Also the stoping lying above and apparently connecting with level No. 3, between Reimer's raise and Apex raise. This was both in the fissure and in the beds above the levels. The

flat ore body extended not to exceed 25 or 30 feet along there into the beds. This flat ore body was overlaid and underlaid with barren limestone. I did not see any fissure in the roof or bottom of the ore body. Level marked No. 3 was run on the Crescent fissure, and had ore continuously in the drift. I did stoping between No. 4, or Hanauer tunnel level, and No. 3, level from the Apex raise. In all of those places spoken of where ore was found in the beds and fissure too the ore in the beds and in the fissure connected, and there was not any difference between the ore in the fissure and in the beds as to grade and character. It continued on up through to Level No. 3 and connected with that stope there. When I got up within 15 or 20 feet of the Antelope drift I ran into old workings stoped out that had been done before my time. There was an old stope there below the Antelope drift partially caved, and ore around the edge of it. I did not run the Antelope tunnel. I put up a raise at about station 2760, above the Antelope drift; went up about 150 feet, as I remember now. It is marked on the map "Mahoney's raise." I believe it was mostly in the foot wall. We took some ore right at the top of the Antelope tunnel level and made a raise above the Antelope tunnel level, and did stoping there.

Cross-examination:

I first went into the employ of the Silver King Mining Company as manager in 1901. Went into the employ of the Kearns-Keith Company in 1902. Was assistant manager of the Silver King Company from 1901 until I left the employ of the company a year and a half ago. Was in the employ of the Kearns-Keith Company until they went out of business by selling to the present defendant, which was in June, 1907. This was about five and a half years. I acted as superintendent of this company.

Redirect examination:

I did stoping from the 400 level in the vicinity of the Aetna shaft, between 1904 and 1906. Started at station 528 and stoped up to No. 3 level. The ore was taken entirely from the fissure. It was very regular and small—not to exceed 15 or 20 feet at most in an eastern and western direction, and was in ore all the distance between the two levels. It was taken out and the milling ore was milled and the high grade ore shipped. There was probably 800 or 1,000 tons; not to exceed one-tenth of it was shipping ore. I made raises above the No. 3 level east of the Aetna shaft. It is marked "Raise" and has an elevation practically 1730. This raise went up in the fissure in crushed material, ore and vein matter. I made a raise and worked a way east of the Crescent shaft; don't know the distance now. There is a raise shown on Exhibit CV marked "unsurveyed". It runs from the No. 3 level up above the No. 2. I put that raise up and extended it 160 or 170 feet approximately above the No. 3 level. It went up on the fissure and there was ore continuously in the fissure all the way, bunches of shipping

ore and the balance low grade. While I was in the employ of the Kearns-Keith Company I started a raise from the Elephant stope, which now forms a part of the Columbia raise. I extended the work up 60 to 80 feet. For that distance it was in the Crescent fissure. We had ore all the way going up. There was some high grade as well as low grade.

Cross-examination resumed:

My superior in the active management of the Kearns-Keith Company was Thomas Kearns. During this time the Silver King property, of which I had the active management as assistant general manager, was a very extensive property, working a great number of men and having large and extensive openings. A very large part of my time was spent in the examination of that property. From 1904 to 1906 we were working a great number of men in the Kearns-Keith property. I had a number of assistants but I looked after the details very carefully. I have spoken of the Crescent fissure. This is a name well known as applied commonly to that particular fissure. It was always used by us in referring to it. The name was applied to it before my time. It was not usually applied to the fissure found in the Alliance tunnel to my knowledge, but it was applied to the fissure found in the Hanauer tunnel. It is a pretty uniform fissure wherever one meets it, and easily recognizable as such. Its general characteristics are that it is a pretty large fissure, filled with porphyry, crushed quartz, crushed material, ore, and having walls, both foot and hanging. It is characteristically a fissure through the rock as distinguished from a bedded vein or anything of that sort. A great deal of the crushed material is crushed to a mud; some of it crushed to mud and tale. The other particles I recognize as crushed quartz and lime in the fissure, with iron pyrites in places. To the best of my belief and knowledge I would say that it would be a fair thing to state that from the point where the Hanauer tunnel first strikes the Crescent fissure on for 2800 or 2900 feet to the face, as I found it in 1902, there was a continuous body of ore visible to the naked eye, with waste mixed in with it. No part of this was stoped in this distance, before we got to the Aetna shaft. There was 100 then more than one raise up but I do not know what they were put up for. I saw chutes in them and they appeared like ore chutes. Never saw any ore coming down through it.

At about Station 630 in the Hanauer level we ran into pay ore in quantity. It was lead ore. You could notice the lead in it and iron pyrites, and I think there was some zinc in it. We could afford to stop it. We had six or eight feet of good ore in the fissure at that point. That ore extended about 150 feet, at least 150 or 160 feet along the drift. We went down, stoped out, running an incline down on it 25 or 30 feet. The ore went out into the beds from this incline, but not to exceed 50 feet. It was 30 feet wide in places and feathered down to nothing as you went out into the beds. By width I mean from top to bottom. It extended along the strike of the beds approximately 100 feet.

As I remember there were two beds of ore went out between the Hanauer tunnel level and No. 3 level, but I cannot give the distance or the height. Referring to the lower one, it did not start out until we got above the Hanauer. It went about 25 feet out into the beds. I saw it when it was finished. I remember it very well. I went in there and I saw all those stopes cleaned out and we never abandoned them without my permission to do so. When I say it extended out that far I mean that the ore was all gone and nothing left in the face but barren lime. The mineralization feathers out and fades into the beds in places. I mean I cleaned out all the ore in sight, and at times ran the cross-cut out into the beds to be sure there was nothing left behind but lime boulders. When I cleaned out the stope there I cleaned out all of the ore, low and high grade, and worked up to the barren lime and took some of the barren lime out before I abandoned the stope.

I observed a winze in the McKay cross-cut and there is a drift that runs out to the northeast which has no station marked upon it. I never knew any name to the drift. This drift is run in the fissure. There is a fissure in the drift. We started out on the fissure at station 1992 and got into the bedded ore deposit. When I speak of the thickness of the ore I mean the greatest thickness in these bedded deposits. I found the greatest thickness on those bedded deposits close to the fissure, right up against the fissure and extending out into the beds; this was so in every case. The greatest thickness was in conjunction with the fissure.

110 RICHARD H. BROWN, a witness for the defendant, testified that he was a partner of the witness Brooks, and that he had checked up the maps with his notes, as far as they were platted from his [botes], and that the maps in evidence were correctly platted.

HANS JOHNSON, a witness produced by the defendant, testified as follows:

I am forty years old; I live at Park City and am a miner, having been engaged in mining about 17 or 18 years off and on. Have been in Park City district about fourteen years. I am a little familiar with the map, Exhibit A. I know the 400 level as shown there. Was in what is known as the Hanauer tunnel within the past few weeks, and I know where the Aetna shaft is when I am on the ground, and the Columbia raise. I recently made an examination of the Hanauer tunnel from the Aetna shaft westerly to the Columbia raise. Was with Mr. Blood, Mr. Dailey, Mr. Gitsch, Mr. Kearns and Mr. Leary. Was through with Mr. Wiley and Mr. Blood. Have been through on two different occasions sampling it. Where I was able to observe the walls or sides or portions of the walls of the stope or level it seemed to have been driven in a fissure vein. I found a little ore along through the level. Was present when samples were taken from that level by Blood. I am familiar with the work shown on Exhibit A as the Constitution tunnel, the Consti-

tution west drift and the Constitution east drift. There was an old tunnel that was run. I did not have anything to do with running that. It is marked on the map "Constitution tunnel." There is marked on this map "Constitution west drift" from the westerly side line of the Monroe Doctrine to the Constitution tunnel." I ran the working marked on the map as "Constitution east drift" from the Constitution tunnel to its easterly termination. It was done under Mr. Blood's direction to me. I had charge of the work. In the roof of the Constitution west drift I had mostly wash in the top of it. The bottom and sides of the drift were in quartz and decomposed porphyry. From the westerly end of the Constitution tunnel we had to carry value in metals. In the Constitution east drift the roof is broken up country, wash. I had to hold up the roof by driving spiling under the debris. It was more of a decomposed nature through the Constitution tunnel than it was on the west side, and there was a fissure disclosed in both the Constitution east drift and west drift. I could not tell the width of it. It was not shown in the drift. I took samples along that line of work at different times and gave them to Mr. Dailey. Some of the samples I had numbered and some not. I took samples from the Apex tunnel and from the Democrat tunnel. I gave him the samples September 19th, No. 2 from the Apex tunnel. I took it from the left side of the Apex tunnel right about in the drift running easterly from the Apex tunnel from station 2791, 16 feet east of that. I also gave Dailey sample No. 3 from the Apex tunnel No. 1. This was taken 80 feet from the drift running westerly from the Apex tunnel, from station 2737 1/4. I have been up the Columbia raise from the Elephant slope of the Hanauer or 400 level and thence on up to the Constitution tunnel, and was in the Custer drift that goes out from the Columbia raise. There is ore in the face of that drift. I was in drift C. That is in the fissure, which is in ore and I would judge would carry values. I was in the Engine drift shown on Exhibit A and all through that drift. It is in the vein and there is evidence of a fissure. Was in drift E above the Engine drift. It goes out to the side of the raise and cross-cuts back to the fissure. When we get to the fissure there is ore. Was in drift F. There was about the same thing as drift E—ore in the fissure. Was in K-K level No. 2 from the Columbia raise. In the Constitution tunnel I took up the work that had been begun by somebody else. It was all caved in. It was around 65 or 70 feet. At the portal of the tunnel it was wash, pretty nearly all of it. Very nearly all the tunnel was in wash. There was no roof at all. It was an old tunnel, caved in; about 40 or 45 feet of it there was in the wash. I call it wash where it has been sliding and not solid. The roof had caved down and filled up the tunnel. As you go in the tunnel under ground you first go through the wash and dirt in which the trees grow and then you get into broken rock, which is near the surface of the hill. It is fissured and broken, as I say, loose, and as you get on farther in it gets more and more solid. We got through the dirt and earth in which the trees and grass grow and into the rock in about 10 or 15 feet, and

after that it was rock, and if the rock had not been caved down it would have been overhead in the tunnel. The old tunnel was cleaned out by me about 65 or 70 feet. Some rocks and dirt had caved in from the roof. We got rock standing in places as a part of the bed rock, about 74 or 75 feet in. [Q.] We started the west drift before we got into this solid formation, and the Constitution east drift as well. We began these drifts about the last part of October, 1911. We did not run along any of the old workings in going either way on these drifts. In running the Constitution tunnel I did not see any foot wall of the fissure. I found what I thought was the hanging wall, but this was in the Apex Tunnel, not in the Constitution tunnel. I did not reach out in the Constitution tunnel at all.

112 GEORGE D. BLOOD, a witness produced on behalf of defendant, testified as follows:

My age is 42. I am a mining engineer, having graduated at the University of California in 1892. Have been engaged in mining ever since that date. Have lived in Park City at various intervals since that year. Since 1907 I have been employed constantly by the Silver King Coalition Mines Company. Am now superintendent and have been since July 1, 1909. Under my supervision the Columbia raise has been constructed, excepting about 60 feet at the lower portion of it. The Columbia raise is in the vein. From the Alliance tunnel level to a point about 60 feet below a certain cross-cut drift, designated "Drift E," from there on upwards it is in the hanging wall to the K-K level No. 1. At that place there is an offset and from there up to the Hanauer tunnel level we followed the hanging wall of the vein. The Hanauer drift was cleaned out from the head of the K-K incline to a point opposite the head of the Columbia raise. The Reimer raise was cleaned out. This starts up in the foot wall of the vein and continues, in my judgment, for a distance and then runs into the foot wall, where it reaches level No. 3 from the Apex raise. Using the longitudinal projection Exhibit CC to illustrate the points that I make, I s-art at the west end of the Constitution tunnel, which was first, the work of which was done from the bottom of the shaft about 40 feet deep. From that a cross-cut was run to the north, cutting the Crescent fissure and passing through the foot wall of the porphyry dike found there. In that cross cut at about 30 feet we encountered the hanging wall of the porphyry dike, and ore showing there at some distance. Perhaps 20 feet further we encountered the foot wall of the porphyry dike with ore showing there. The thickness of the dike is indicated on Exhibit A as between Station 2849-b and the face of the cross cut to the north. This cross cut was not exactly on the surveyed side line of the Monroe Doctrine, the westerly line of the Monroe Doctrine, and the drift was run on the porphyry a distance of about 10 feet to the southwesterly until the line was cut under showing the vein crossing with ore, the westerly side line of the Monroe Doctrine as surveyed.

The drift running northeasterly from that cross cut follows the porphyry dike continuously throughout its whole length. There is ore showing at intervals along that drift, and this will be more definitely placed on the map prepared showing the samples taken.

The drift starts on the hanging wall of the porphyry, goes through to the foot wall of the porphyry at Station 2849, and runs back to the hanging wall at Station 2849-n, and this drift was
113 run to a point marked 2849-k. It was run in raising very rapidly as it went to the east.

Here it connected with the drift which has been run from shaft No. 4 westerly, shaft No. 4 being about 20 feet deep; and the work there being along a porphyry dike in the Crescent fissure. The same description holds to the Constitution tunnel. Near the Constitution tunnel as seen on Exhibit A that from Station 2850½ to 2904, the direction of the drift is somewhat more southerly than the general trend of the drift, and this working is from the foot wall fissure disclosed in the Constitution tunnel at 2850½ in to the fissure at 2904. The Constitution tunnel itself starts in wash and continues in wash to a point 40 or 42 feet from the mouth of the tunnel. At that place ore is found in place in the bottom of the drift. The top of the drift is yet in wash, and the working was an old working when we took hold of it.

The tunnel was cleaned out from its mouth to Station 2850-a. From that point to the west and east, or from that point to the east it is a drive, and from Station 2850½ to the west it is a new drive.

The Constitution tunnel easterly was driven from the cross-cut portion of the tunnel at Station 2850-d to Station 2953, from the Constitution tunnel site—that portion of the drift easterly. From Station 2953 was driven from the shaft some 48 feet deep, designated as No. 2 shaft on Exhibit A. This drift discloses porphyry from the Constitution tunnel easterly to within 2 or 3 feet of the face, which is 20 feet southeasterly from Station 2958. There we encounter the hanging wall of porphyry—and when I say porphyry I mean a filling that is in the Crescent fissure, a portion of the filling of the Crescent fissure.

Returning to the cross cut portion of the Constitution tunnel at Station 2850-1/3, we encountered the top of an old raise. This raise we cleaned out from the Apex tunnel level, sending the waste material and rotten timber down through the workings to the Apex Tunnel level. We leave the Constitution tunnel at 2850-1/3, and the work was entirely on the fissure or at the foot wall of a large fissure to the Apex tunnel level. This work shows a banded structure of vein material from the Constitution tunnel clear through to the Apex tunnel level. Samples have been taken, which will be placed more accurately upon a sample map, at intervals roughly indicated as at Station- 2850-c, 2850-e, 30 feet above Station 2740;

d?

114 also in a drift westerly from Station 2850-b. There is a small stope in the drift easterly from Station 2850-c still showing ore in the edge of the stope.

On the sectional projection Exhibit DD the raise just mentioned reaches the Apex tunnel level at Station 2740. The drift on the Apex tunnel level is there run on the foot wall of the fissure. To the westerly from that point it follows the fissure, and at the time we first opened that we had not cleaned out the drift to the solid face. Later, during the last three or four months, we did clean that out and advanced the face about 5 feet. This drift through its whole extent from Station 2737 is continuously on the vein, and shows the banded structure of the fissure vein. Samples were taken along this drift, and at a place near Station 2739 an old winze was found, which was cleaned out to its bottom, so far as we were able to determine its bottom—we believe that we got to the bottom of that; and that is now accessible.

There is a raise at about 10 feet east of Station 2739 which is also on the vein, but the top of which I have never explored, and there are no ladders in that. From Station 2739 the cross cut portion of the Apex tunnel to the point 2791 is through the Crescent fissure. The bedding planes are distinctly seen to the north of Station 2737, showing the dip of these beds to the north and south of the drift, and that at Station 2791 the bedding is also to the north; solid limestone.

The fissuring and folding of the formation between Station- 2737 and 2791 is all dipping to the south. We found an incline at the Apex tunnel, with an old working up to a point 20 feet south or easterly from Station 2738. There was an old working still continuing, with cribs in there, indicating from the top of a winze a work or a chamber cut out, as though there had been stoping in that section. We did not explore that further.

The Apex tunnel level was run by us in new ground from about Station 2738 to the face as shown on Exhibit A. A drift was run to the easterly from Station 2791 to 2792-b, as shown on the map about 20 feet beyond that point on the hanging wall of the Crescent fissure. This drift we have had to leave within two months because of the ground swelling there. The material is along the hanging wall and it is decomposed porphyry which crushes up the timbers. I will state that there is very little timber in the Apex tunnel level up to Station 2737, and from a point about 15 feet beyond that to Station 2791 we were compelled to timber slightly.

115 From Station 2791 to the south it is again without timbers and stands without any difficulty at all.

A drift was driven westerly from Station 2737½, first angling across the vein to catch the hanging wall, which it did catch at 2737-d, and continued along that wall to its present face at the Johnson winze.

The Johnson raise was driven from Station 2905 up to the Constitution tunnel level. It was started on the hanging wall, the hanging wall of the raise being in the wall of the vein up to 30 feet above the Apex tunnel level, at which point the vein flattened and widened, turning the drift down as flat as the vein or wall, but we flattened it somewhat for about 30 feet, where we caught the hang-

ing wall showing porphyry, not decomposed this time, but solid porphyry.

From this point we—there is a working shown on Exhibit DD, a small cross cut into the hanging to determine whether or not there was any possible slip in the hanging behind us, and we found there was none, and knowing there was a slip in the foot wall we took our raise down to get over, and encountered the porphyry as we see it at Station 2949-e.

From that point to a point about 20 feet above Station 2949-b we followed the porphyry, and there we passed into the foot wall of the porphyry and remained in the vein until we reached the Constitution tunnel level. The portion shown on Exhibit DD between Station 2949-c and the Constitution tunnel was driven as a winze from the Constitution tunnel. We considered it a safer working for our men in that crushed portion of the country to sink a winze where we could drive spiling than to raise to it.

On Exhibit A at the point in the Johnson's winze which starts at the Apex tunnel level at Station 2905-a we sunk first a winze south to Station 2905-c on the hanging wall fissure. This showed ore and this selva at about 20 feet below the level, and again near the bottom of the level. The portion of the work shown on this exhibit as Mahoney's raise encountered the Johnson's winze at Station 2905-c. I stated that we encountered the vein at the bottom of Johnson's winze. I should say that there was a short cross cut from the top of the incline at Station 2905-b to Station 2905-c, which was in the vein. We really cut the hanging of the vein at Station 2905-b, as it is placed here upon the map. From Station 2905-b to a place shown on Exhibit DD as Station 2905-g, the Mahoney raise was in the hanging wall country. The raise is best shown on Exhibit

116 DD. The raise is in the foot wall and the vein from Station 48-b to the Antelope tunnel level 2707, and there is an ore return, which is a sample from about Station 48-3?, which will be shown better on the sample map. The working marked Mahoney's cross cut at Station 2854 is driven about 50 feet into the hanging line, showing there the beds dipping to the north as normally. Along the Antelope tunnel level the Crescent fissure is exposed there showing ore and porphyry. Samples were taken in the drift to the easterly from that. There at about 22 or 23 feet easterly from the raise, there is a high grade streak of carbonate ore, crusted on the wall of the fissure, on the foot wall of the porphyry.

The Antelope tunnel drift is an old drive which, in doing the work I have mentioned, we were compelled to clean out from Station 2752. At that point it reaches the Crescent fissure where the porphyry is shown. Some of the porphyry is in a solid condition, and others decomposed. The mud resulting from a decomposition of the porphyry I consider a chemical product of decomposition, rather than a chemical process of alteration. Whether or not there is ore showing along that wall I would not say. The working is rather tightly lagged along there, but I do know that there is porphyry there. The Antelope tunnel from Station 2752 to the northerly passes into the foot wall country of the Crescent fissure, and finally to the surface

at about half a mile. Going below the Antelope tunnel level we named the old workings Mahoney raise, but the work, however, had been driven up from the Antelope tunnel level as high as the Mahoney cross cut, and the Mahoney cross cut had been driven or run on. A winze below the Antelope tunnel level was also driven, connecting with the No. 3 level from the Apex raise. It is under the foot wall of the Crescent vein for the greater portion of its length, and certainly at the top or at the Antelope tunnel level on Exhibit A, work shown as level No. 3 Apex raise, and traveling easterly from the bottom of the Mahoney raise, we pass through a country that is very heavy. The drift is not more than four feet high there. It is necessary to stoop there to get through the drift, the timbers having been crushed down by the weight of the country. Coming down along the northerly side of the drift indicated, the workings above the drift at that place, and at a place about 60 feet from the top of Reimer's raise there is ore showing there. The ore is in large, or rather large chunks of galena well crystallized, whether in place or not I am unable to say, because of the timbering and the limited space there was to examine the walls.

The level No. 3 from the Apex raise passes into the foot wall country at about Station 2766, or 20 feet westerly from the head of Reimer's raise. The head of Reimer's raise at that level is in the foot wall country—of the fissure. It continues in the foot wall of the fissure to within probably 50 or 60 or possibly a little less than that, of the Hanauer tunnel level or No. 4 level. This is indicated on Exhibit DD. At the foot of Reimer's raise on the Hanauer tunnel level we are in the Crescent fissure again, and there at least on both sides of it the porphyry shows. The westerly portion of Level No. 3 from the Apex raise is now closed from the Mahoney raise westerly, and has been closed for five years. We did not find it necessary to this work, we thought, to clean out that drift. The present work, continuing from the foot of Reimer's raise on to No. 4 level, we go to the west a distance of some 60 feet on the fissure, and at about 6 feet westerly from Station 2960 the ore is showing in place in a fissure for a distance of about 20 feet; beyond that the ore shows in a fissure. The ore, as shown at 6 feet west of Station 2960, is a narrow seam, I should say not more than an inch of rather good galena. The galena is clean but it is mixed with a certain amount of quartz. That is in place, it is perfectly solid and could not have been dragged in. That is true of every place.

From Station 2960 southerly a cross-cut is run about 20 or 30 feet through porphyry, to connect with the head of the Columbia raise as it was coming up to No. 4 level. The Columbia raise from its top at Station 2961 to the level No. 1 of the K. K. is in and near the hanging wall fissure. The raise is wholly within the fissure, the hanging wall of the vein being used as the hanging wall of the raise, except for about 15 feet at the bottom, where we go up and there touch the hanging wall. The hanging wall is exposed in the cross-cut at Station 2880 upon Exhibit DD; it would be—I am not able to determine the exact point of Station 2848, but it is slightly

to the south of Station 2880, perhaps 10 feet to the south of Station 2880. So far as I know, there was no ore encountered in the Columbia raise beyond a point about 10 feet above the floor of the level No. 1 of the K. K., but beyond Level No. 1 of the K. K. there is a very good exposure of ore, I will say a face for the full height of the drift about 10 feet easterly from the foot of the raise. That ore is in the fissure in place. It is a solid mass of galena and zinc blende.

Turning to Exhibit A, this cross cut is shown between the stations mentioned. At Station 2847 we get to the foot wall of the Crescent fissure, and the drift is open westerly from that point to Station 669 and the fissure showing. We had to retimber and clean out this drift in doing this work, and there the fissure ore is shown standing

conformably with the fissure, and showing a more or less banded structure of a fissure vein. From Station 2669 to the north the drive is in the foot wall country. The K. K. Level No. 1 westerly from Station 670, has not been accessible since I have had charge of the work. I have within the last five years been able to go in that drift a certain distance, but I would not state to what point, but probably about 70 feet or so.

We cleaned out and retimbered the drift from the Station 669 to a point 50 feet approximately east of the cross cut which starts from Station 2847. In driving the cross cut from 2847 the ore that was mined there was stored in that drift, and the drift is filled with loose ore for about 9 or 10 sets. It is not accessible. No one can go into the face of that, nor did we find the face of the drift this time. I have been to the workings indicated by stope here some five years ago. From a point 10 or 15 feet southerly from station 2848 on Exhibit A to the top of the Columbia raise, or to the Columbia raise on level No. 1 of the K. K., we cross cut in the hanging of the Crescent fissure, the Columbia raise having reached Level No. 1 at K. K. in the hanging wall. This is shown on Exhibit DD, the cross section presented, of the raise. We did not have the surveyor just at the time when we run the K. K. Level No. 1 and the raise was run about 20 feet above the K. K. No. 1 Level in the hanging wall. That is still open—that country stands well.

As has been explained by other witnesses, this K. K. incline continues down to the second level in the foot wall country. A cross cut is run from its bottom at Station 421-b or 675 through 676 to 677. It is in the foot wall country. Returning to Exhibit DD and going down the Columbia raise we are in the hanging wall of the Crescent fissure. At the second level of the K. K. a cross cut is driven northerly and encounters the Crescent fissure at about 10 feet from the raise. On Exhibit A the work shown between Stations 676-c and 676-b is on the foot wall of the Crescent fissure. It is in the fissure and shows ore—did show ore when we drove it. Ore can be seen now, a sprinkling down through the lagging between the stations mentioned. The face of the ore as we drove the drift came from the northerly top corner of the drift to the southerly floor of it, banded across the face of the drift as we went through it. It conformed to the dip of the fissure and was the foot wall fissure—the ore was all in the fissure. From Station 676-b to 676-a the drift is in

the foot wall. That connects up with the description I gave from the foot of the K. K. incline. The drift westerly from Station 676-a or 677 is not accessible, and has never been accessible since I have been with the Silver King Coalition Mines Company.

119 Returning to Exhibit DD I will point to the intersection of the Columbia raise and the second level of the K. K. This intersection is in the hanging wall country. The Columbia raise continues in the hanging wall country to the drift designated as Drift F. That is on the incline and is about 90 feet below the K. K. No. 2 level, as indicated on Exhibit A. The drift is driven for 10 or 15 feet to the westerly, and then a cross-cut has been driven northerly a distance of about 20 feet. This exposes the hanging wall of the Crescent fissure at its face, showing the ore in place standing conformably with the fissure, dipping at approximately 60 degrees, 55 or 60 degrees. That was the last work that was driven from the Columbia raise. We had the Drift E out—we drove that while we were still driving the raise. After we had completed the work of driving the raise we came down to Station 660 shown on Exhibit A, and did the work indicated by Drift F in order to expose the vein between the K. K. Level No. 2 and Drift E. We did not penetrate the vein to any extent in Drift F. From Drift F to Drift E the Columbia raise is in the hanging wall of the Crescent fissure. It is in the hanging country. On Exhibit A it is shown as a short drift about 10 feet long to the westerly from the raise and a cross cut about 30 feet long. The hanging wall of the Crescent fissure was encountered at the corner of the drift as shown upon Exhibit A. As the cross-cut was run to the northerly ore was encountered near the bottom of the drift at about 5 feet from—or cross cut in about 5 feet from the drift, and that continued as a bed until we struck ore lying conformably with the fissure at the face of Drift F. I mean the deposit had more extent horizontally, or nearer horizontal, than it did vertically. The bed was in the fissure, that is the bedded deposit was in the fissure; whether it was ever a bed in the sense of following a sedimentary deposit I do not know, but the fact is that it now lies flat until we get to near the face, where it turns up and forms the foot wall of the Crescent fissure.

On Exhibit DD, starting at Drift E we go down about 60 feet below Drift E in the Columbia raise, at which point we again strike the hanging wall of the Crescent fissure, and samples will be shown here on the sample map. From that point 60 feet below Drift E there is ore showing practically continuous to the Engine drift in the raise. The occurrence at 60 feet below Drift E is merely a mud, a black mud which gives value, the crevice there being about two inches thick. What is below that crevice I do not know because there is no working under that. We made no attempt to reach the foot wall in that section. As we go down the Columbia raise from the point mentioned the raise is deeper in the vein—it gets into the foot wall and under the hanging wall of the vein, and there the ore shows conforming to the fissure, solid, and it could not have been dragged into the fissure. Samples have been taken down that raise to the Engine drift and in the Engine drift. The Engine

drift starts out as shown on Exhibit A from the Columbia raise, and then a cross cut is run to the north and to the south. This work was done at the time the Columbia raise reached that point. We had followed porphyry in the raise almost continuously up to a point about 40 feet below the Engine drift. We then had the slip showing in the back of our raise, and we got under that slip slightly, but picked it up again when we reached the Engine drift, and I satisfied myself that we had the Crescent fissure.

The fact appearing that we did not have the porphyry in our raise, I put in a foot wall and a hanging wall cross cuts, to see if by any chance the porphyry was lying above or below the vein that I was following as the Crescent vein. I did not discover the porphyry in either of these drifts. At Station 2612 at the junction of the two cross cuts with the drifts, the Crescent vein shows, going on its strike to the west, continued into the solid country, which we did not explore. There is a streak that has *sluffed* off about 6 inches in thickness, conformable with the fissure, and soft mud. The hanging wall of that soft streak is perfectly solid, showing galena and carrying values in copper and silver, and is in place, the wall of that conforming to the fissure. The foot wall of the Crescent fissure, as determined by me, is nearer the face of the Engine drift showing in the fissure there, and the material between the ore occurrences that I have described and this fissure being crushed up. At places in that material I found considerable pyrites, and at places spots of galena.

Drift C is driven out from the Columbia raise in the foot wall
b?

of the soft streak, and at Station 2581-o a drift is turned to cut into the streak. It cuts the streak at Station b and gets to ore in place.

The drift was driven westerly from that point about 60 feet, I think in all about 80 feet, drifting on the level of Drift C. The face of this drift is still in ore, and the ore lies there conformable to the fissure. Samples were taken here. From Drift C the Columbia raise continues on a steep pitch to about Station 25-a, at which place we have a chute mouth. I will state in running the Columbia raise from the Alliance tunnel we used a skip to take out dirt down to Station 2850 to the level.

121 Drift B is a very short working, probably 5 feet only in the vein, and there is in the hanging wall raise at that point a showing of this soft material I have described as shown again in Drift C and the Engine drift. There is an ore occurrence conformable with the fissure all up and down the raise from that station, or Drift B to the Custer drift, and in the face of the Custer drift, where a sample was taken, the ore being in place, solid crystalline material, and especially hard on the hanging wall side of that working.

From Custer drift to station 2448 there is porphyry showing in the roof from the Custer drift to Drift B—to station 25-a, either in the top or bottom or sides of the raise for all of that distance. The raise from the Custer drift down to station 2487 is slightly in the foot wall of porphyry, and contains a low grade ore. It is practically solid pyrites, and in solid pyrites there will be occurrences of pay ore,

bunches of galena, but the galena does not amount to anything in quantity as compared with the other.

I will state that we took up and started driving the Columbia raise at a point about 60 feet above the Alliance tunnel level, continued it on the plant that it then had until that was getting away from the porphyry, when I tipped it up to reach the porphyry again, and did continue in the porphyry as far as the porphyry went up on the Crescent fissure. It is possible that the mud that occurs in places two inches wide or one inch wide or six inches wide, as we go up through there, may have some—may be related to the porphyry as a decomposition product. That I cannot determine, whether or not it is true. We reached the Alliance tunnel level, where there is a showing of ore conforming to the fissure lying on the foot wall of decomposed porphyry in place in quantity, but crystalline material.

The raise at Station 3036 on Exhibit DD is in the foot wall of the porphyry. It is in the vein, however, and there are spots of galena and a good deal of pyrites showing in the material there. It is raised vertically about three sets to form a chute-way and engine room to do the work from above that. The top of that raise is in the porphyry, solid porphyry.

My examination of the Hanauer tunnel easterly from the Aetna shaft extends to a point about 60 feet east of Station 408. I am able to say there that there is an ore occurrence conformable to the fissure, in the fissure and in place. There is both galena and carbonate ore showing there and the banded structure—a banded structure also shown at a working called a raise, about 10 or 12 feet westerly from the station at the bottom of the Aetna shaft on the No. 4 level, the raise going up and conforming—
122 or the chute going up and conforming to the fissure at that place. I have observed the fissure at points going easterly from the Aetna tunnel, but I am not sufficiently familiar with it to state exactly what points I saw this or that occurrence out there. Westerly from the Aetna shaft the sample map will show that in company with others I have taken samples for its whole extent to 26 feet westerly from Station 2960.

I have seen the Elephant stope at different periods during the past five years. At times they were working in there, and at times they were not. The major part of the ore mined from the Elephant stope was taken from what I would call the bedded deposits. It did not lie regularly with the beds—the ore made in the beds, and it also made into the fissures above and below.

The Crescent fissure is found from about Station 3035 to the face of the workings most southerly, and to the west of station 3035. I say this is the Crescent fissure. The other fissures are more or less parallel to it, and it is more than likely, in my estimation, that they connect with it. They are somewhat steeper in the foot wall country. At Station 1857 there is a fissure which shows above and below the Alliance tunnel level by workings from a drift shown on Exhibit A, a cross cut or workings at perhaps 10 or 15 feet northerly from Station 3039. The ore in the hanging wall portion of the Crescent fissure on the Alliance tunnel level connects with the ore in the beds of

the Elephant stope at a chute designated on Exhibit A as "Chute," and the top is marked with an elevation of 899.3. There seems to be no number connected with that station.

The samples taken by myself, Mr. Johnson and Mr. James Kearns are designated on Exhibit MM and LL by the green numbers, and the assay results are shown in green. All our samples of ore from the fissure were taken from ore in place and none of it drag ore.

Out in the workings of the Constitution tunnel level and thereabouts the porphyry has been subjected to weathering, and it is of a brownish color usual to a white where it is turned into a mud; but as we get deeper in the vein and even in the Johnson's raise we find a solid crystalline or seamy crystalline rock, with a great deal of pyrites in it. Exactly the same kind of rock, so far as one can determine by inspection, is found on the No. 4 level at the head of the Columbia raise, and at other places along there. I have formed

the conclusion that the porphyry disclosed at the bottom of the Columbia raise (that which I have referred to as being found in the Constitution west and east drift) is the same dike or sheet of porphyry. The first occurrence of porphyry east from Constitution east drift in place is at shaft No. 1 on Exhibit A shown in the Zephyr claim, 439; at 30 or 35 feet below the collar of that shaft a drift is driven west in porphyry and a cross cut driven to the south also in porphyry until it reaches the hanging wall of that. There is a third cross cut about 10 feet from the shaft also to the northerly, which exposes the hanging wall of porphyry. The next occurrence in place that I know about is on the southerly side of the Pinyon claim in the Boss claim. It is marked "open cut" on Exhibit A, and is Station K. The next occurrence in place on the surface is in the neighborhood of the mouth of the Democrat tunnel.

The Constitution east and west drift were run under my direction, and my idea in running them was to run them on the top of the bed rock, and I did so run them, to the best of my ability. There can be a difference in judgment as to what constitutes solid bed rock and what constitutes wash. It is practically at the bottom of the wash and on top of the bed rock all the way. I have spoken in my testimony frequently of a vein, the Crescent vein and the Crescent fissure. By the use of the word "vein" alone I mean to include the fissure and mineralization extending from the fissure. By Crescent vein I mean the vein which is exposed in the Constitution tunnel both east and west, and in the No. 4 level of the Crescent mine from the Aetna shaft westerly, and in the Alliance tunnel, in the drift that is to the south of the stope, the Elephant stope, and including the Elephant stope. When I speak of fissure I intended to convey an opening that has more or less of a deposit, that has more or less porphyry at the present time, showing walls of gouge or slickensides, indicating that it was at one time an opening. Vein is a larger term; it embraces this opening or what was at one time probably an open space and mineral deposited extending from that, either an enlargement of the open space or with boundaries conforming to the direction of the fissure, or perhaps not conforming to those boundaries.

There is not any clear distinction between the two expressions in the testimony I have given, except as I have explained, I think the term "vein" is somewhat broader than the term "fissure."

I include in the Crescent vein deposits that make out into the lime beds from what I consider the fissure. I mean to include in the Crescent vein some of these deposits which have been spoken of by witnesses heretofore testifying as the bedded vein, and to their fullest extent. The bedded veins that have been mentioned as being connected with the Crescent fissure up to this time in the

124 testimony taken in this case, I consider as all a part of the Crescent vein. That would include Crescent workings in Pinyon Hill which are connected with the Crescent fissure as that fissure is exposed in Levels 4, 3, 2 and 1, and the Aetna west drift, and [those] bedded deposits which are marked upon Exhibit A as the Baskin stope, and that bedded deposit which is marked on Exhibit A as the McGregor stope. One marked difference in veins is the difference between a fissure vein and a bedded vein, speaking generally. I will state first that the two classes of veins may be very closely related to each other, and in this particular case are, but it is not always so easy to find the relation between fissure veins and the bedded deposit. There are bedded deposits in the Park City district which conform to the bedding of the quartzite and lime, or the junction of those two formations, and are so extensive with relation to that particular horizon that they would be, in my view, considered a bedded deposit as distinguished from a fissure. There is also in the Park City districts such deposits, or very large deposits and valuable, that have been almost wholly connected with fissures and directly in the fissures, and those I would call fissure veins, and I think generally are considered as fissure veins.

A fissure vein is a vein in a narrower sense, and in order to differentiate from the bedded vein, it is a vein which conforms to a fissure. Now, if you want those—and I will add that those two may be merged, and that the two come into relation with each other so that they make one vein system.

In this particular case of the Crescent Hill the fissure which I call the Crescent fissure does cut the lime beds in such a manner, that is as far removed from a conformability with the beds as one could well imagine. Beginning at the top of the map, Exhibit DD, I place a limit at the drift that runs out from Station 2850-c, or thereabouts, and I place that there for the reason that I have determined that on the foot wall of the vein I have there found the limit. That is the limit, so far as I know. There is no question about that being the limit there in my mind. It is next shown in a drift running from Station 2737 to 2908, and in the winze from that level and a raise from that level, and is shown out on either side of Station 2739, and shown on—that is Exhibit A—and shown on Exhibit DD as at Station 2737. That is another place where I conclude that I actually find the foot wall of the Crescent vein. The foot wall of the fissure corresponds with the foot wall of the vein. We have not only the foot wall of the vein but the foot wall of the fissure at that point. At that point, which I call the drift out from Station

2850-e, and at the second one which is at Station 2737, I find the limits of mineralization, and I have drawn a line between
125 simply because there must be some line there and I might as well draw it practically straight between those points. Down upon the crescent vein I next find its foot wall shown in the Mahoney raise, about 100 feet above the Antelope (runnel) level. We drew the line between the point on the Apex tunnel and the point on the 2000 horizon line, in the shape in which it is drawn because we had no better way of drawing it. I do not mean to say, of course, that the limits of mineralization of this fissure extend out there because of any fact that we have seen that shows it there, but it is drawn between those two points merely as a line to show a continuation, for want of better information, and that distance is 250 feet on a vertical, and probably 400 feet on a horizontal east and west line.

If this tabular body of ore which is just above the 1600 horizon were extended for 50 feet further, that would still be a part of the Crescent vein. If it were extended 150 feet further it would still be a part of the Crescent vein. If that is the only physical fact that has a bearing upon the situation. If it extended 500 feet further in its direction, I know that it would cut, to my satisfaction I know that it would cut other fissures in this country, of which there are several more or less parallel with the Crescent fissure. Then there would arise, to my certain knowledge, physical facts that would complicate the question, and I would not state whether or not I would consider it a part of the Crescent fissure or Crescent vein.

I have not extended the foot wall of the Crescent fissure out to include a bedded vein as a separate bedded vein. The ore making in the beds in the foot wall of the Crescent fissure at the place indicated on Exhibit DD in my opinion is a part of the Crescent fissure. It is a deposit in the limestone genetically connected with the Crescent fissure and replaced the country rock along the bedding at that particular place where it is probably connected with it, and there are instances of country rock eaten out more nearly parallel with the original fissure or vein—being an enlargement of the fissure.

When I find that ore making between these walls of the fissure there I have got the vein. When I find that ore in place and not dragged in I conclude it has been deposited originally there, and when I find ore in the beds showing no signs of being dragged there, I consider that that has been placed there as a primary deposit or a secondary deposit, and not as a mechanical drag.

I found ore making in the beds in the Elephant stope and continuing around and making in the fissure, a continuous
126 band. It was a geological condition as well as a physical condition.

ARTHUR G. DALLEY, being recalled, identified certificates of assay, which were marked Exhibit OO and received in evidence.

CHARLES P. BROOKS, being recalled, testified that he had correctly made the notations on Exhibit OO and the maps Exhibits MM and LL from the information given him by Johnson.

HANS JOHNSON, being recalled, testified that he took the samples respectively at the places noted in the book Exhibit OO, and that the places were correctly noted upon the map Exhibits LL and MM.

DAVID KEITH testified to the delivery of the package of samples for assay given him by W. H. Wiley.

THOMAS KEARNS, a witness for the defendant, testified as follows:

I am an officer of the Silver King Coalition Mines Company and a large stockholder in the company. During the years 1904 and 1905 and from that on down I have been fully familiar with the work being done by the Kearns-Keith Mining Company in Park City. I was an officer in that company until it disposed of its interests to the present defendant. Since then I have been familiar with the work done by the Silver King Coalition Mines Company in its property. I have made an examination of the No. 4 level shown on the map Exhibit A, and particularly that portion of the level running westerly from the Aetna shaft to and beyond where the Columbia raise connects with that level. My examination occupied only two days in December, but I had been there off and on for many years. In December last I made careful examinations and came to the conclusion that the 400 level, from beyond or easterly of the Aetna shaft and thence westerly to the Columbia raise, was driven on a well-defined fissure vein. I have been from top to bottom of the Columbia raise on a number of occasions. Was there while the work was being carried on and after connection was made. The fissure can be traced practically continuously from the bottom of the Columbia raise to the connection with the Constitution workings. I was at the mine at the time the 400 level was driven westerly by the Kearns-Keith Company. That part of the 127 400 level west from the Columbia raise is run on a vein, with the exception of about 30 or 40 feet at the west end. I was at the mine when stoping was going on at those places which have been testified to by Mr. Dailey, both above and below the 400 level and up above the level No. 3 from the Apex raise; was there more than once. The appearance of the ore that stood in the fissure was the same as that which lay in the beds, and it was the same character and grade. The ores connected both above and below the level. They came out of the bed and from the fissure and went through the fissure and intersected.

WALTER H. WILEY, being recalled by defendant, testified as follows:

In the study and practice of my profession I did my first work as a miner, working in the mines thirty-two years ago. After graduation from the Colorado State School of Mines in 1883, I worked for a few years as a surveyor and assayer. For the last twenty-five years I have been continuously engaged in my business as a mining engineer. During that time my work has extended into most of the western states of the United States, and also into Alaska, British Columbia, and the Yukon Territory, and into many of the states of Mexico, and into Peru and Corea, examining and reporting upon mining properties and directing the development.

I have endeavored to get into all the accessible workings as shown upon those maps, Exhibits CC, DD and A, to ascertain the fact, as nearly as I could, regarding the nature and extent and continuity of these mineral deposits. It included everything which in my opinion would throw light upon the nature of the vein and deposits in this mine. My first examination of this immediate hill and workings was in October of last year. I had previous to that, some thirteen years ago, I had been in the Silver King mine, but simply as a visitor, and — two other intervals I was in it, but my practical examination was in October of 1911. My second examination was in January of this year—the total number of days spent in the examination being thirteen.

I should say in a preliminary way, that the formation of Crescent Hill consists of deep lying quar-zite, and above this the limestone is seen, and black shale on top of that; that this strata dips at an angle varying from 10 to 30 degrees, averaging about 20 degrees in, generally speaking, a northerly direction. Perhaps, to illustrate that, if I may have that first photograph of the surface which was shown before. The photograph, as an incident to showing the appearance of the surface of the hill, shows in the back-
128 ground Jupiter Peak, sometimes called Tyree Peak. The top of that mountain on the northerly, or right hand side, coincides with the dip and strike of the limestone strata, and, as I take it, although I have not been on top of the peak, shows in the structure of that mountain very well the dip of the limestone which formed the bulk of the rock of Crescent Hill.

Through this limestone and shale and in a direction corresponding very nearly to the strike of the mass of rock, there has been a fissure, the Crescent fissure, which has cut through this strata, and intruded in this fissure there has been a porphyry dike. Since the intrusion of the porphyry there has been much mineralization, and in places an enlargement of the original fissure, forming what constitutes today the Crescent vein, or Crescent fissure vein.

This vein is developed on its strike for a distance of exceeding half a mile. It is developed on its dip, showing a dip in a southerly or southeasterly direction, of an average of 53 degrees for a distance of about 1,950 feet.

A great deal of the work which appears to be on this fissure as

shown upon Exhibit A, the plan map, is in the Crescent, but I have seen a number of the developments and have seen the Crescent fissure in this work at a sufficient number of places so that I know that this development, extended in a northeasterly and southeasterly direction, follows the general trend of the Crescent fissure.

Beginning at the surface and taking the development which has been made, and beginning at the westerly end of the development on the western side line of the Monroe Doctrine claim, we have a series of workings developing this vein at or near its apex. The wash covers the entire northern slope of Crescent Hill, and is of varying thickness. This most westerly shaft, which is called Shaft No. 3, has been sunk to a depth of 47 feet—not all of this is through this wash, but at this depth of 47 feet a cross cut has been run in a northwesterly direction, and at a point 25 feet northwesterly of the bottom of Shaft No. 3 the hanging wall of the Crescent fissure has been cut. At a point 38 feet north of the No. 3 shaft we are still in the Crescent fissures; so that the entire thickness, that is the foot wall of the fissure is not seen at that point. That would be 13 feet of the vein shown, but the vein continuing still to the north. The drift which is driven from this No. 3 shaft in a northeasterly direction follows, may say, the debris for its entire distance across the Monroe Doctrine, the Cumberland, the Constitution, and the Brave Columbia claims.

129 This drift was not driven from this shaft, all of it, in that direction, but to do the work in a shorter time a series of shafts, two, three and four, and a tunnel, the Constitution tunnel, was driven and work prosecuted from those different points. That work has been done, nearly all of it, between my first visit in October and my last in January. The No. 4 shaft, which is upon the side line between the Cumberland and Monroe Doctrine claims, is 28 feet in depth and shows the vein at the bottom of that shaft. The Constitution tunnel was driven along following an old working which was caved and through the wash for a distance of 41 feet, where it encountered the foot wall of the vein. The wash continues in the tunnel and the caved material in the top of the tunnel for a distance greater than this. No. 2 shaft is some 49 feet in depth, and drifts were also extended from that in an easterly and westerly direction. No. 1 shaft is an old working—I don't know how deep it is. It is caved at a distance of about 37 feet, but at 27 feet down that shaft a drift was run in a westerly direction, showing the vein and the porphyry which is a portion of the vein filling.

The nature of the filling of this Crescent fissure vein throughout these workings near the surface is necessarily somewhat different from that in depth, due to the surface alterations. It is in part the porphyry dike, some places recognizable plainly as the porphyry; in other altered so that its porphyritic structure is entirely lacking.

I produce six samples of material. No. 1 is a piece of nearly unaltered porphyry, showing the distinct porphyritic crystals stained brown with oxide of iron, but still plainly recognizable as porphyry. No. 2, both pieces marked No. 2, are still porphyry but changed by the vein action and perhaps to some extent improves as it gets deeper,

from the fact that it is nearly at the surface, and to show the material which is usually called, often called talc. When it is wet in the chalky?

lime it is quite sticky, and sometimes very [talc]. No. 4 is still porphyry. The structure is entirely gone and it has been mineralized, that is with iron pyrites, and there is a little lead showing in that sample. The iron pyrites shows distinct; the lead is not distinct to the eye, and the lead in many places in these upper workings has not been recognized, because the galena or sulphate of lead is also changed into carbonates, and is usually stained with oxide of iron so that especially when in small particles it may not be distinctly recognized by the eye. No. 4 from the Constitution tunnel 130 workings, 13 feet east of No. 3 shaft, has been assayed. That is another sample from this immediate vicinity has been assayed. It goes 2 ounces in silver and 6 per cent in lead. No. 3 sample is a piece of quartz. There is a great deal of quartz in this vein. It comes from the Constitution tunnel, 30 feet west of the tunnel, at a point where I now hold my pointer. It is quartz, vein quartz. There is a great deal of it in that vicinity, as well as elsewhere in the mine.

Now continuing still on the surface in an easterly direction we have a considerable interval where at the surface nothing can be seen of the vein. It is entirely covered by wash.

Coming back to the end of the Constitution east drift we have the hanging wall of the vein, and with the porphyry plainly shown both in the crossing of the drift at the end of the tunnel, and in the little cross cut running to reach the hanging at a point near the breast.

The depth of the wash in that section is not absolutely known throughout, but immediately above that working a tunnel called the Remnant tunnel was run, and a winze sunk in that some 7 feet in depth, and that is all in wash, and by removing the timbers which are necessary over the top of this drift the rock is shown shattered and broken, and while there is no sharp line of transition from the fractured rock to the plain debris, in my opinion the top of the solid formation is at a point 5 feet above the top of that drift. At this point, as an element to determine it, the hanging wall of the Crescent fissure vein crosses the northern side line of the Boss claim, survey No. 126, at a point 65 feet northeast of the northwest corner of the Boss, and in my opinion continues, the hanging wall continues from that point in a southeasterly direction for the full distance of the Boss claim, crossing the eastern side line—the eastern end line at a point near the center of that line, and at a point marked "Boss shaft," which through an inspection of the calls in the patent I know to be marked Boss discovery shaft. It is true there is a long interval of surface where we see nothing to indicate that vein. We get clear over on top and to the eastern slope of the hill before we find a surface working, pit or open cut, which shows the porphyry dike, which is a part of the vein, and the vein material very plainly on the northern side of that dike.

Continuing easterly from that point the next point at which we

see plainly the vein is on the surface over the Democrat tunnel, and especially in the Democrat tunnel. Going in that tunnel we go for a distance of about 30 feet to an unusually large body of quartz, a part of the filling of this vein. Back of that quartz lies 131 the porphyry dike, the porphyry very much altered extending through there, and has been drifted on apparently searching for ore. Usually the vein material, as distinguished from the porphyry, lies on the under side or northern side of the dike. In other instances it lies in the dike, and in others, as mentioned in the Democrat tunnel, it lies on the hanging side of the dike.

The vein as shown in that tunnel has a width of about 80 feet from the foot side of the porphyry dike to the extreme hanging side, as it is shown. The extreme limits of the vein are not shown in the tunnel, on account of the erosion which has cut off a portion on the hanging side of the vein. The line which is drawn by the open cut shown by the pink coloring upon this map from the east end line of the Boss to the point crossing the Boss side line, is not based alone upon these two disclosures; it is based upon these disclosures as fixing the exact spot where they occurred, but it is also based upon the underground developments.

We have been able to follow this vein underground on the Hanauer tunnel level continuously beneath the surface. I have seen the vein in the Aetna tunnel level, at the end of the Aetna tunnel and immediately beneath a portion of this apex. So that based upon what can be seen upon the surface, in connection with the underground developments, I am satisfied that this line shows substantially the position of the hanging wall of the Crescent fissure vein.

Going down from the Constitution tunnel, there are two ways, two winzes; one through an old working which was made certainly many years ago, and another through a more recent working which is called the Johnson raise.

Taking the old working first we go down through a winze, we go off into a drift at a distance of about 60 feet, and another drift about 30 feet lower, and through a series of workings apparently made for the development and searching for ore, until we reach the Apex tunnel at a point on the foot wall of the Crescent vein. That is run not only through the vein, plainly recognized vein matter, but at several points there is good ore shown in those workings. At one point there has been a small stope made, and there is ore in there today. There is very good ore showing at a point about 65 feet down, where a drift has been run to the west. I have seen some others which I can perhaps show better consecutively later. So that I say that that work tracing that old working following from the Constitution drift to the Apex tunnel, follows vein material plainly to be recognized as such all the way.

132 The Johnson raise, which is at a point a short distance to the east of this shown upon cross section DD as following near the hanging wall, follows also continuously in the vein. A portion of it is in the porphyry, and the porphyry is not mineralized to any commercial extent. Through a considerable portion of this

raise it is not commercial ore. There is mineralization and ore in the sense that there are assays obtainable through a portion of this raise.

When we reach the Apex tunnel shown upon the plan map at the end of the Johnson raise, marked with the letters "Johnson's raise," we are at a point considerably to the south, about 80 feet south of the point which we reach if we come down when we come down the foot wall working. There is a cross cut directly connecting them, but we can follow on the drift driving along the foot wall portion of the vein back to the Apex tunnel; from there across the full width of the vein, some 110 feet as measured on a horizontal line to the hanging wall, and from there by a drift driven continuously along the hanging wall to the Johnson raise. The material which forms this widened portion of the vein is a great deal of it lime. The filling of this fissure, like that of all fissures with which I know and am familiar, has been derived largely from the adjacent rock. In places it is porphyry or porphyritic; at other places it is largely lime derived from the lime country. So that the filling across this interval, this 110 feet, is very largely lime, but it is lime entirely different in nature from the country lime on the side.

Going back in the foot wall of the Apex tunnel we have the country rock lime plainly shown with a dip of about 20 degrees in a northerly direction. Going into the cross cut which extends into the hanging wall, we have an equally hard, silicified lime with the plainly dipping beds in each case in the ground, just as my pencil is laid upon this cross section. Between these two points we have no stratification planes of the bedding at all. On the contrary we have a structure at right angles to the dip of the bedding, and conformable with the dip of the Crescent fissure. The material in between has been shattered and broken, and at one point in the middle there is an old working drift which has been run out, and beyond a cave an enlargement of this working resembles a stope. I don't know whether it is a stope or not because it is in such a bad condition.

Continuing down the Apex tunnel we go through the Johnson winze and the Johnson raise. Before I take up that I should perhaps speak of one point, that at a distance of 50 feet in a north-easterly direction from the old workings which connects with the

133 Constitution tunnel, there is a winze shown upon the plan as just inside of the west side line of the Brave Columbia.

That is an old working, and at the time in October when I was first there it was not accessible to the bottom. You could go down part way, and it has a dip of about 70 degrees at the top, but it was cleaned out between October and January and you can go down that now. In the bottom it has a much flatter dip than at the top. It shows there the material of the foot wall of the vein as it goes down. The development from the Apex tunnel down upon the vein is upon the hanging wall side through the Johnson raise and the Mahoney raise in Level No. 3.

Level No. 3 from the Apex raise [as] marked upon the longitudinal section. This work does not follow the vein continuously.

The portion which is in the vein is shown upon Exhibit DD by the red coloring. The portion known as the Johnson winze extending down a distance of about 60 feet below the Apex tunnel, is entirely in the vein and shows good ore at the bottom. The irregular nature of this work from the Johnson winze down to Mahoney is partially due to the fact that the upper portion was sunk as a winze, and the lower portion was raised. The Mahoney raise is reached at the foot of the Johnson winze, and then at a distance of some 50 feet lower a drift has been run, showing upon the longitudinal section connecting with the top, or near the top—I mean Mahoney raise. Now, I happen to know, from having during the progress of the Mahoney raise been at the top, that the Mahoney raise did extend a short distance above this point, but today it is entirely caved. There is an air hole which has been cut and it acts so suddenly that they had to abandon not only the workings but the tools which were there, and that accounts for the drift which is run from 20 feet to the west and the continuation of this development in that shape. That drift is entirely in the vein, but at its western end a vertical, or a raise was made vertically for a ways—for a distance of some twenty feet, in order to get away from this bad caving ground, and the upper portion of that raise is up to the hanging wall. The vein, however, shows in the raise, and from that point up it continues in the vein.

Now, going down through Mahoney raise and through the Mahoney cross cut we follow the vein all the way. The Mahoney cross cut is run out into the line. Continuing on down the Mahoney raise we are in the vein until we reach a point 110 feet on the foot side above the Antelope tunnel. There the raise enters the lime foot wall and it does not show the vein again in the raise itself until we reach a point in the Reimer's raise about 60 feet above the
134 Hanauer tunnel. The vein, however, is not developed through this country. On Level No. 3 from the Antelope tunnel, on both of those levels there are old drifts. The Antelope tunnel can be followed, the drift of the Antelope tunnel can be followed to the west through what appears to have been an old winze, and old stopes, showing considerable ore; and then from that through a cross cut and out to the surface Level No. 3 can be followed—Level No. 3 from the Apex raise, at the foot of the Mahoney raise, can be followed in an easterly direction for a distance of about 120 feet on the vein continuously, and showing a layer of ore in place to a point about 10 feet south of the head of Reimer's raise, shown on the cross sections better at this point.

Reimer's raise, as I take it, is an old working put up certainly some time ago, and closely timbered, and very wisely, to my mind, to back in the foot wall, in order that it could be kept open as a permanent exit from the mine. The nature of the material in that raise for the distance of over a hundred feet cannot be determined, except at a very few intervals between the timbers, but it appears to be the country rock lime. At a point, however, about 60 feet above the Hanauer tunnel on the hanging side of the Reimer's raise, you can see back between the timbers and see the vein, and from that point down to the Hanauer tunnel you can see the vein through the

timbers only on the hanging at several points. At the Hanauer tunnel we are entirely at the foot of the Reimer's raise in the Crescent vein. This Hanauer tunnel or Level No. 4 is the longest accessible development upon the vein. Going westerly of the Reimer's raise—The Apex raise is entirely inaccessible. I know nothing of that. All the workings above the Hanauer tunnel, except those two through which I have gone, are inaccessible, although many of them are shown upon the map.

Now, from the foot of the Reimer's raise in a westerly direction we can trace the vein for a distance only of about 80 feet. There the level is caved. We can see the vein plainly; we see galena ore in it, recognizable plainly to the eye as ore.

In an easterly direction we can follow upon the vein or close to the vein for a distance of some 1,200 feet. At this point some 83 feet east of the west side of the Aetna shaft the drift leaves the vein, and is in the nature of a cross cut at this point, disclosing the full width of the vein, something over 30 feet in width. For a distance of about 200 feet from this last point upon the vein the Hanauer tunnel is out in the hanging wall lime. At 200 feet about east of the point 83 feet east of the Aetna shaft. The station 135 number is on the map over the letter "p" and is marked 140, and another one 404. That is near the point.

From that point easterly for a considerable distance the Hanauer tunnel follows the vein, how far I don't know. I have been through there several times, but I made no special observation about that point, except to notice that it was in the vein for a very considerable distance.

This vein throughout this tunnel is not plainly to be seen so that you can simply walk through that tunnel or that drift. It is timbered closely throughout, in the sense that the lagging has no intervals between, because usually the laggings are spaced with intervals between, and in some cases no lagging at all upon the side, but the ground is swelling and it is necessary that it be timbered.

Again at some time this drift has evidently been caved, and we can see today where the water has been dammed back and there is a line of red mud entirely coated on the sides of this drift, so that it is necessary to take off this coating of mud in order to see what is beneath; and so it is necessary, in order to see this vein as well as you can through there, to pick between the timbers and go very carefully and slowly over that drift.

The vein, if you go out in this way, can plainly be seen following that drift, except that at a point about 250 feet east of the K. K. incline the drift goes back into the foot wall. The vein is entirely on the hanging side or south side of the drift. The entire width of the vein cannot be seen at any point except in one cross cut where a short cross cut from the K. K. incline is, where by climbing over the dirt you can see that cross cut has gone through the porphyry and reached the hanging side, which constitutes there the hanging side of the vein.

The mineralization throughout these workings is not continuous in the sense that it is pay ore. The mineralization is continuous

in the sense that wherever you dig there you will find some indications of ore in the way of deposition, at least, or pyrites or quartz or something of that nature. It is not continuous ore by any means, however, and in order to get samples that assay, which I took through there, I made diligent search at the points where I took those samples, and I took at those points what I thought was the best material in the way of ore obtainable at those points. In many instances I happened to know as the result of some other samples which I did take, as well as there.

136 From the Hanauer tunnel along for a distance of about 1,000 feet we go to the Columbia raise. There is an old working from the Hanauer tunnel back in the foot wall of the vein, known as the K. K. incline, which reaches the K. K. second level. This does not follow the vein. At a point some 45 feet above the K. K. No. 1 incline it shows ore, ore in the bed, back to the northern side of the incline, but with that exception, so far as I can see, that is above that, there is a place timbered and I don't know what was in it, but below that it is in the barren lime until from the foot of this incline drifts were driven out which reached the Crescent vein.

So going back and down the Columbia raise from the Hanauer tunnel for a distance of a little over 100 feet, we go through the Crescent vein, largely porphyry, rather closely timbered. I do not believe that the vein through there has any especial ore. So far as I can see there is none. However, at the K. K. No. 1 level, at the foot of the level we come into a very considerable body of ore showing plainly in the incline from the dirt in the raise as a streak of more than 3 feet in width, at nearly solid silver, lead and zinc; and in a drift run first as a cross cut to the north and as a drift to the west, and connecting with the K. K. incline, we have a very considerable body of excellent ore. In the K. K. No. 1 level there is ore having the direction of the fissure, and plainly to be seen, and also in the drift there is nearly solid galena which has the structure of the vein. We have both—a mingling—and this is a case where this ore, having the direction of the beds, is entirely within the Crescent fissure as it extends down, and is distinct, if you wish to make that distinction, from the Crescent vein which incloses the bedded vein. So that we have in that case both ore having the direction of the vein and ore having the direction of the fissure. All within the fissure; and the other occurrences above here, all have the direction, so far as I can tell, of the fissure.

Now, continuing down from the K. K. level, when we go through the cross cut to reach the Columbia raise, we are entirely in the hanging wall until we reach a point some 61 feet below Drift E. This raise, as you go through it, is today so wet that unless a person is incased in rubber clothes from head to foot he will be soaked in a few minutes. The water pours out in a torrent and you cannot carry any light unless they are protected by a tin pan. The difficulty of putting up this raise is perfectly apparent today. The portion lower down which is within the vein in many places, has the timbers twisted out of shape, and there is a tremendous pressure upon the

timbers. I know from my own experience as a miner that
 137 that was an extremely difficult piece of work, and that at
 points it must have been extremely dangerous; that there was
 liability to cave at any time, and that considering the long distance
 as it went up from the top of the raise to the level, even the lives of
 the men who worked there were imperiled. When this raise is out
 in the hanging country the pressure is much less, and it is much
 safer to put it up in the limestone than in the vein. At intervals,
 however, from the head of this raise in the limestone down to this
 point 61 feet below Drift E, at three intervals there are cross cuts
 back to the face. The first is the old level No. 2 of the K. K.; the
 second is this F, and the third Drift E.

In all these workings, these other workings where the cross-cut has
 been run back from the raise to intersect the vein, ore has been
 found, good ore, ore plainly deposited in the Crescent vein, and hav-
 ing a direction parallel to the walls.

Perhaps it would save time to show these samples as I go along,
 and it will necessitate my retracing my steps a little, because the first
 sample here above the Columbia raise, for instance, sample No. 5,
 was taken from the Mahoney raise at a point 110 feet above the
 Antelope tunnel. That sample looks a good deal better than it is.
 It is largely pyrite, and the pyrite is often low grade. In this piece
 in addition to the pyrite there is some little galena showing, but the
 assay of the pyrite which was taken from that point went only a trace
 in silver.

Sample No. 6 comes from the Crescent vein at the Antelope tunnel,
 102 feet east of Mahoney raise. It is not good ore. It assays 2.6
 ounces silver and .2 of one per cent in lead.

That illustrates the nature of the vein filling, not only the sul-
 phides of iron, but the deposition of quartz shown by the white ma-
 terial along with the iron, and is deposited at the same time as the
 iron.

Sample No. 7 is a sample of excellent ore. It is from the Crescent
 vein on the No. 3 level, 63 feet west of Reimer's raise. It assays
 167.1 ounces silver and 15.1 per cent lead. In addition it shows
 what I did not previously mention, a little copper. There is a little
 copper visible at different points in the Crescent vein.

Sample No. 8 is from the Crescent vein, Columbia raise, on K. K.
 level No. 1. It assays 12.2 ounces in silver, and 22.7 per cent in
 lead. In addition it has considerable zinc. It is a sample from that
 point near the end of the raise where I spoke of the vein being an
 excellent body of ore, which could be mined and stoped at a
 profit.

138 Sample No. 9 is from the Columbia raise, 35 feet west of
 the Columbia raise, in the K. K. No. 2 level. It assays 12.24
 ounces in silver, and 30½ per cent in lead.

Sample No. 10 is from a point in the F level of the Columbia raise
 from the Crescent vein; The F. level being about 90 feet below the
 K. K. No. 2 level. It assays 8.6 ounces in silver, and 18 per cent
 in lead; and when I give these values I should explain that the
 assays are based on the sample taken from the immediate vicinity,

often portions of the chunk itself which is shown. These chunks in many instances were broken from larger pieces, not only in the mine, but afterwards outside, in order to get them small enough for the box.

No. 11, which is broken up, consists of a number of pieces of sulphide, and is from the Crescent vein, Columbia raise, Level E., or the second level below the K. K. 2. It assays 21.4 ounces in silver, and 39.3 per cent in lead. It also carries considerable pyrites.

Sample No. 12 is from a point in the raise 37 feet above the Engine drift—I am now getting lower than I traced it before—at a point about 61 feet below this E drift, the Columbia raise goes into the vein and remains in the vein from that point down to the Alliance level. So this sample No. 12 is at a point 37 feet above the Engine drift. It assays 3 ounces in silver and half of one per cent in lead. It is not commercial ore.

Sample No. 13 is from the Engine drift, 10 feet west of the Columbia raise. The Engine drift—well, to go back to Drift F, where we have this cross cut running 20 feet back and showing the vein in the end of that cross cut we have a very distinct, good streak of ore. So the same thing applies to Drift E. In the Engine drift the conditions are different. In that we have a cross cut both towards the hanging and towards the foot, and the full width of the Crescent vein is shown there about 26 feet wide as measured upon the level. We have on the hanging side there an especially well defined showing, and the dip and structure of the Crescent vein are plainly to be seen because it is caved out above the top of the drift. This sample No. 13, which comes from the Engine drift 10 feet west of the raise, assays 44.8 ounces in silver, and 59.7 per cent lead.

Sample No. 14 is from the next lower working upon the Columbia raise, known as Drift C. Drift C is the longest working on the strike of the vein below the K. K. 2. The drift has been run to the west a distance of about 85 feet on the Crescent vein, showing excellent ore, not only in the drift but in the face, and having plainly the dip and structure of the Crescent vein itself. This sample 14 came from a point 20 feet to the west of the raise in this drift, and assays 23.6 ounces in silver, and 30 per cent in lead.

Going down the raise from Drift C the next is marked Drift B. I have never seen what was in that. I understand it is a very short working, and it is caved and inaccessible today. At a point just above this we see the porphyry coming in, and at a point 50 feet above the working marked as the Custer drift I took sample 15, which is of a somewhat different nature, largely iron pyrites, to see what that would show. As usual with pyrites it does not run very well, only 1.6 ounces in silver.

Sample 16 is from the Custer drift, the last drift in the Columbia raise before reaching the Alliance tunnel. It is from the face or breast of that drift. The Custer drift is driven 12 feet out from the raise, and this sample is from the face and assays 198 ounces in silver, and 46.6 per cent in lead, of a value of over \$155.00 per ton.

These samples illustrate from the porphyry at the top barren down there, barren there and on down and from the iron, the zinc, the

galena, and the little copper, the nature of the ore in the Crescent vein, except that at the surface in the upper workings these sulphides are decomposed and in many cases are —.

The last two samples are from the Elephant stope, the first sample No. 17 being from the Elephant stope and the Crescent fissure too. That is at a point where the ore which lies back of the fissure in the bed commingled with the ore in the fissure itself. So that at this particular spot I could not say whether that is out of the bed or out of the fissure, because it is really out of both. It shows the galena, which is not by any means the best sample obtainable, but it shows the galena and in addition it shows the quartz in which the galena lies.

Sample No. 18 is the ore in the bed from the Elephant stope, at a point over 100 feet away from the foot wall of the Crescent fissure. It shows iron, zinc and lead. Sample 18 is from the Elephant stope at a point over 100 feet removed from the Crescent—from the foot wall of the main Crescent fissure, and it shows iron, zinc and lead.

That takes us down to the Elephant stope. The Elephant stope unfortunately is inaccessible in many places. I have been through all the places I could get into, but I have not seen all of the stope by any means. The drift on the Crescent fissure itself on the hanging side of it is caved for a distance some 75 feet at its westerly end, but at a point about 40 feet west of the foot of the Columbia raise a cross cut has been run back into the dike, and at some point a cross cut has been run southerly across the porphyry, showing the full thickness of the porphyry dike which lies on the hanging side, in this case, of the fissure.

We can go back through a roundabout drift and perhaps 300 feet in length, and reach a point on the northwest edge of the Elephant stope, but removed only about 150 feet in a straight line from the point from which we started. We can't go straight across. The ore in that stope lies chiefly conformable with the limestone beds, dipping in a northerly direction at an angle averaging probably 15 degrees. At several points in that stope we find cross fractures.

After leaving the main Crescent fissure on the south we pass across and can follow along on the strike of a number of cross fractures having a direction generally parallel to that of the Crescent fissure, and in some cases the same dip, but usually a steeper dip, and in some cases a reverse dip, dipping towards the north instead of the south. There are four of these fractures which are large or plain, and those are the four fractures, that is, counting the Crescent as one fissure we show on cross section DD, and three other fissures unfortunately not very plainly for a distance, but they are shown there, and shown as large, or possibly on a slightly magnified scale, from what they really are upon the ground, because the actual fissure itself is only a few inches in width.

The first of these fissures back of the Crescent fissure is the one on which a drift was run some 120 feet in an easterly direction, and other workings were made. This fissure has a dip to the south but much steeper than the Crescent fissure.

About 50 feet north of that we have another fissure, which has a

reverse dip to that of the Crescent. This fissure has been drifted upon for fully 60 feet. There has been some stoping done along, and then a place where there is a lot of water filling the stope which is not below the track.

These two fissures are marked on this Exhibit DD with the dip observable in the stope. If these stopes continue up they would intersect at a point somewhere below the Crescent fissure. At the north edge of the stope we have another plainly marked fissure having a dip reversed from that of the Crescent. This fissure could only be seen by going around this same 300 feet on the level of the Elephant, and then down a tortuous working to a point below the level of the Alliance tunnel in the stope. The fissure there, and this is a great exception, is plainer to be seen now than it was when the work was done, because in the hanging wall away up above the stope

141 it is caved, and today there is an open fissure there plainly to be seen above. That is the one that is noted there, and its extent is marked on this exhibit as extending up to the point of intersection with the Crescent fissure. Now, that is an assumption; that is, we have that fissure at this point about 100 feet under the Crescent fissure, and extending up plainly above into the roof of the stope, is entirely above it at that point, and we have assumed that that continues in the direction where we see it. If so it will meet the Crescent fissure and at a point on the foot side of the raise where we could expect—about where we would expect that fissure to come, there is the same fissure on the foot side of the Columbia raise.

Now, these fissures, to my mind, are simply subsidiary fractures of the main Crescent fissure. I believe the forces which created the large, strong Crescent fissure, fractured also the lime in the vicinity of the Elephant stope, and that these fissures do extend downward as shown upon this, cross section DD, substantially in the direction as shown. I believe also that they will continue below the Alliance tunnel—how far I don't know—perhaps not far, because they are by no means as strong fissures as the main Crescent fissure. They are, however, important. In my opinion the Elephant stope ore body was formed at that point, because the Crescent fissure, in connection with these subsidiary fractures, fractured the limestone and rendered it in a condition to be mineralized by the solution coming from the Crescent fissure, and also permeated out through the subsidiary fissures. I not only believe, but I think I may say I know that the mineralization which came from these fissures extended out into the bed was similar in nature, and filled the fissures and the beds at the same time. To illustrate that, there was one point in this northern subsidiary fissure where there was an opportunity to get a sample, which shows the mineralization both in the fissure and in the bed. It is rather heavy, weighing with the box some 330 pounds. It lies in the box in the position it had in the mine, except that the upper edge of the box is tilted at an angle of 14 degrees to represent the bending of the lime. I took the precaution to mark by an arrow the portions which are in the bed, because if I did not I could not tell here today which was the bed and which was the fissure. As a matter of fact I know from having

marked it in that way, that the left hand side of this rock was a vertical fissure, and that the upper side was a horizontal bed, that is speaking generally, being inclined 14 degrees from a horizontal. This shows the galena, the pyrite, quartz and zinc of the vein, and practically is the very same mineral in the bedded deposit as in the vertical deposit, in a continuous line of deposition, showing

142 to my mind that the mineralizing solution coming from the fissure extended out into the beds, mineralizing both at the same time. This sample, on a small scale, exhibits my idea of the way that fissure, including the bedded ore, was formed. I might say this in connection with those fissures. I speak of them being in my opinion subsidiary fractures, extending downward from the Crescent fissure. I have examined, of course, the Columbia raise throughout its entire extent. I have never at any point seen any of those fracturings crossing up into the porphyry, and then on up into the hanging country. I believe that when this fissure was formed, and perhaps the bending of the fissure at a point about 300 feet above the Alliance tunnel has had something to do with that. By the operations of nature, by some force there, resulted in an abrupt bending of that fissure, and probably the same forces caused the fracturing from that fissure down, just as you would break a hickory stick, bend it to the point of breaking, and a portion of that stick will extend on for a short distance; it is not a clean break either of the rock or the stick.

The Crescent vein has a strike of north 60 degrees east, and a dip averaging 53 degrees to the southwest. I include as the Crescent vein the Crescent fissure and the mineralization which has extended along or from that fissure, not only the main Crescent fissure, but other fissures which may be connected with it. In my opinion ore found in the beds unquestionably was deposited at the same time by the same agencies, and by solutions coming from this main fissure or fractures from it. There is absolutely no difficulty with the assumption that it continues between the points where the workings do not follow. That assumption is based on such absolutely demonstrated facts that I think there is no doubt whatever in my mind that it is continuous between those observed points.

The first line of samples was taken through the Hanauer tunnel, being at the point *furtherest* along and extending out to the Aetna, and east of the Aetna shaft.

Sample No. 1, which came from a point 86 feet west of the Reimer's raise, was a sample of ore in the Crescent fissure. It went 16.4 ounces silver, and 34.33 per cent lead.

Sample No. 2, which is taken at a point 66 feet west of the Reimer's raise, was taken back where there is a little ore partly in the beds, although the dip is not as flat as the beds, but there is ore, galena solid, to be seen back of it entirely conformable with the Crescent fissure. It went 3.64 ounces of silver, and 9.27 per cent lead.

143 Sample No. 3, which came from a point 61 feet east of Reimer's raise, and consisted of pyrite and some galena, went 2.64 ounces in silver, and 3.53 per cent in lead.

Sample No. 4 came from a point 88 feet east of sample No. 3, had iron and zinc in it. It was a low grade, and it only went .12 [ounces] of silver and nothing in lead.

I will call attention in that connection to sample No. 4-a, taken by Mr. Blood in the immediate vicinity, which was somewhat better than sample No. 4-d. It was good ore, running well in silver. It ran 138 ounces in silver, and 32.3 per cent in lead; that is, there was a sample of rich ore afterwards taken near the point where my iron and zinc came from, which did not run well.

Sample No. 5, taken from a point 61 feet further to the east, was oxidized stuff and run only .24 of an ounce silver. There (16?)

is also sample 5-a, which went better. It went 1600 in silver. This oxidized stuff you can't tell it by the eye—at least I can't—whether that is going to run or not.

Sample No. 6 is 95 feet east of 5, decomposed, running only .32 silver.

Sample 6-a goes 2.32 silver, and 18.2 lead, better stuff, that appears to have been found from a point further to the west, a few feet.

Sample No. 7, 100 feet east of No. 6, galena, etc. I don't remember now just what etc. means. It goes 16½ ounces silver and 4.7 per cent lead.

Sample No. 8, a hundred feet further in, sulphide and carbonate, 7.6 ounces silver and 4 per cent lead.

Sample No. 9, 100 feet further in, galena, run 14.8 in silver and 7 per cent lead. It could not have been solid galena. It must have been specked.

Sample No. 10, 100 feet further in. I have marked that galena only. It goes 4.02 ounces in silver and 4.7 lead.

Sample No. 11, 82 feet east, runs 37.72 silver and 43.4 per cent lead.

Sample No. 12, I have got that marked as bearing copper. It goes 26.26 silver and 8.9 per cent lead. That is not the same No. 12 that is in these boxes, not at all. It is just another line entirely. I can give you the samples if you wish, which correspond in that box with those on the map, as I come to them. I have not taken this occasion to exhibit those samples, because this line of samples was taken from the face of the Elephant stope and then going off in the raise in the Hanauer tunnel.

Sample No. 13, 100 feet east of No. 12, copper; goes 43.42 silver and 4.2 per cent lead. We did not have this assayed for copper. These are simply notes I made that there was some copper visible.

Sample No. 15, 93 feet east of 14, at the east end of raise, goes 1 ounce in silver and .8 per cent lead.

Sample 15-a, taken practically at the same time, [given] 89.2 silver, and 31.34 per cent lead.

Sample 16 was taken at the extreme point where we can take samples continuously on the Hanauer tunnel without going through that 200 feet of country. It is at a point 78 feet east of the west end of the Aetna shaft, where the vein is very plainly seen, the

best point of all simply because there are no timbers there. It is on the end and it is in the vein instead of on the side or in the top or in the bottom. It goes 6.8 silver and 3.27 per cent lead. These are all the samples I took from the Hanauer tunnel.

And then the next day—this was done on one day—we went to the surface, and sample No. 17 is taken from the No. 3 shaft working and cross cut 49 feet down a vein in the face, which is 38 feet from the shaft. It goes .44 silver and .2 lead. There seems to be some more samples afterwards taken here. Going east on that drift I took two more samples, Nos. 18 and 19. No. 18 is 7 feet east of the cross cut, pyrite on north side, and goes .62 ounces silver and 1.3 per cent lead; evidently some carbonate of lead in there with the pyrite.

No. 19, which is 13 feet east, goes 2.01 in silver and 6.0 per cent in lead.

No. 20, which is 55 feet further to the east, goes 6.3 ounces of silver, and .27 per cent lead.

Then I should perhaps say in explanation, at the time these samples were taken these drifts were not connected up. You had to go down one shaft and then go up on the surface and come around; so No. 21 is marked as No. 4 shaft, drift 20 feet down, 5 feet east of shaft, which goes .6 of an ounce in silver and .3 per cent lead. The green sample, 21-a, is very much better, going 11.4 in silver and 19.56 per cent lead.

Sample 22 is from a point 65 feet east of shaft, and assays 1.8 in silver and nothing in lead.

145 Sample 23 from a point 88 feet east of shaft, goes 2.8 in silver and nothing in lead. I have got this marked as the red brown sample, showing it is from the oxidized surface material.

No. 24: That is taken from the Constitution tunnel at a point 29 feet west of the tunnel. It goes 24 ounces in silver and 1.4 per cent lead.

No. 25, taken from a point 52 feet west of the tunnel, goes 7 ounces in silver and 5.3 per cent lead.

No. 26, from a point 72 feet west, goes 1.3 ounces silver and nothing in lead.

No. 27, which was taken from the south end of the tunnel, the Constitution tunnel, goes 7.7 silver, and 9.5 per cent in lead.

Now, going northeasterly from the Constitution tunnel, I did not find anything that I thought would run, and I did not take any samples through there. I did at the end take one to see if it would run, No. 28, and it did not. It went a trace in silver. It seems that there are some other assays taken of it running something, but not much.

Now, No. 29 begins with the series going below the Constitution tunnel down through these raises.

No. 29 is the Constitution old winze, 60 feet below the tunnel, at the top of the drift. It goes 102.9 ounces in silver and 27.7 per cent lead. That is 60 feet below the tunnel, and the tunnel is perhaps 15 feet below the bed rock.

Constitution old winze, 150 feet below Constitution tunnel, sample No. 30 goes .72 ounces of silver and nothing in lead.

Sample No. 31, from a point 29 feet above the Apex tunnel, and these are on the foot side of the fissure or the fissure side of the vein; go 57.6 in silver and 46.3 in lead.

Sample 32 came from the hanging side in the Johnson raise at a point 29 feet above the Apex tunnel. It goes .6 of an ounce in silver, and nothing in lead.

In the Johnson's winze sample No. 33, 20 feet below the Apex tunnel, we have some good ore. It goes 39.56 ounces in silver, and 7.94 per cent lead.

In the Johnson winze at the bottom at the connection I took a sample going .2 of an ounce in silver, and nothing in lead. There seems to have been some very materially better green samples taken through there, as shown upon the exhibit.

146 The Mahoney cross cut, even where it is not back in the foot wall, or the Mahoney raise, even where it is not in the foot wall, is tightly timbered, and I don't believe there is very much ore through there, and while I cannot, and perhaps I should not say that because on account of the filling, I can elsewhere determine it. However, the sample I took down there, No. 36, 110 feet above the Antelope tunnel, looks pretty good, but did not run much. That is Exhibit No. 5. It only gave .08 silver and nothing in lead.

Sample No. 37, taken from the Antelope tunnel, 20 feet east of Mahoney raise, good ore, 65.4 ounces in silver and 15.73 per cent in lead.

Sample No. 38, which is Exhibit No. 6 in the box, an assay from that spot, 102 feet east of the Mahoney raise, gives 2.6 ounces silver and .2 per cent lead; not very good ore.

The next sample, Mahoney raise from Antelope tunnel down is not in the vein.

The next sample comes from Level 3, 29 feet down from Reimer's raise, and 63 feet in, and that is box sample No. 7. That goes 167.7 in silver, and 15.1 per cent lead.

That completes the samples down the Hanauer tunnel. From there we went down in the Columbia raise and in the workings connected with the Columbia raise.

Sample No. 40 was taken from the Columbia raise at the K. K. No. 1 level, near the east end of the raise, and goes 18.24 ounces in silver and 22.7 per cent lead.

Sample No. 41 was taken back in the K. K. incline from over in the bed, and it went 17.2 ounces in silver and 20.94 per cent lead.

Sample No. 42 came again from the Columbia raise workings in the K. K. No. 2 level, 35 feet west of the Columbia raise. That went 12.24 ounces in silver and 30.5 per cent lead.

Sample No. 43 from F level, 20 feet north of the raise, where the cross cut is run back cutting the vein, gives 8.6 ounces silver, and 18.7 per cent lead.

Sample 44 for the next accessible working where I can get to

the vein is E level, and run 21.46 ounces silver and 39.34 per cent lead.

Sample No. 45 came from where the vein goes into the Columbia raise 61 feet below the E level, and goes 4.4 in silver and 2.4 per cent lead.

147 Sample 46 came from the Columbia raise, 95 feet below E level, gave 19.4 ounces silver, and 7.4 per cent lead.

Sample No. 47, 115 feet below E level, gives 52.2 ounces of silver and 7 per cent lead.

Sample No. 48, which is 37 feet above the Engine drift, goes 3 ounces in silver and half a per cent in lead.

Sample No. 49, from the Engine drift 10 feet west of raise, gives 44.8 ounces of silver and 5.97 per cent lead.

Sample No. 50, from the C drift at a point 30 feet west of raise, goes 22.6 ounces silver, and 30 per cent lead.

Sample No. 51, at a point 50 feet above the Custer drift in the raise, goes 4.6 ounces silver and nothing in lead.

Sample No. 52, from the Custer drift—that is exhibit sample 16 in the box, gave 198 ounces of silver and 46.6 per cent lead.

No. 53, in the Columbia raise at a point 30 feet above the Alliance tunnel, goes 5.92 silver and nothing in lead. That was largely pyrite.

With the exception of sample 41, taken from the beds, all the other samples were taken from the fissure; and each of the samples 1 to 53 was taken from ore in place where originally deposited by nature.

I have been on the surface at the point indicated as the discovery of the Brave Columbia, Constitution, Cumberland, and Monroe Doctrine. The discoveries of the Brave Columbia, Constitution and Cumberland are pits in the wash, three feet deep. The discovery of the Monroe Doctrine is in wash four feet deep; that is, today they are caved, but from the appearance of the dumps I do not think they ever went much deeper, and what was in the bottom of them below the points you can see today, I don't know, except I think they were all entirely in wash. From observations of all the work accessible, not only here but elsewhere in the immediate vicinity, and especially from the fact that the Constitution tunnel working constituted what might be termed a cross cut entirely across all four of those claims, and at no point in those workings was there any northerly or southerly vein to be seen, I am clearly of the opinion—

.Mr. Critchlow: I object to that as being immaterial and irrelevant, what his opinion may be upon that subject.

The Court: The objection will be overruled.

148 I preferred to state it as an opinion with the basis, explaining the basis of the opinion. I might perhaps say I know, because I have been carefully through there, and I have not seen any vein running in a northerly direction, and there is no vein which is of any extent continuing in a direction at all parallel with the side lines of any one of those four claims.

Cross-examination :

There is no way of getting from the Constitution tunnel through these Apex workings except by the course that I have traveled, in order to reach a junction with the Johnson raise. The way I have described it is the only way of going from the Constitution tunnel through the foot wall workings to the Johnson raise or Johnson winze. The country between Station 2,737 on the Apex tunnel and Station 2,737½ on the same tunnel is all within the Crescent vein. I have described that very carefully, or tried to, on my direct —. I will repeat it. The very nature of the country through there is largely lime. The filling of the Crescent vein across that space is largely lime, but it is lime entirely different in character and structure in every aspect. It is a lime which forms the hanging wall side further to the south than the Apex tunnel, or limestone which forms the foot wall of the Crescent vein towards the mouth of the Apex tunnel. The structure of this lime, instead of being that conformable to the beds, is conformable to the dip of the Crescent vein. It is fissured and at one point I mentioned about the middle, where a short distance has been run, there are evidences of former pro'ably stoping—certainly mining work. That is inaccessible except for the short distance shown upon the map.

There are no lime beds to dip. It is derived from limestone; there is no bedded structure whatever. I mean to say there are no beds and therefore no dip of the beds. I think that the structure of the lime material which is in there is parallel to that of the Crescent fissure.

The thickness of the vein, if treated as a projection, will depend upon the two points, upon the opposite side from which you projected, the thickness of the Crescent vein directly opposite that winze is absolutely demonstrated by the workings which extend above upon the foot and hanging. The thickness of the Crescent vein as shown by that cross section might vary if projected according to the portion of the vein from which it was projected. As shown upon the cross section it is taken [as] the point where we can best see it in the Apex tunnel. There is a cross section cut right squarely across it. If

projected from a point directly opposite that winze it does 149 not appear so thick, because it is not so thick there. I think I should say that this vein was not a projection. The workings are projected and the vein is actually put upon this projection at the point where we see it, regardless of any fact of projection or anything else; that is, the workings through which we can trace it show the vein at the point at which we see it.

The country in which lies the Silver King mine is a stratified country, mostly sedimentary deposit, quartzite and limestone and shales, and they have a dip toward the northwesterly; about the direction of the strike and dip of these beds as compared with the general strike and dip of those beds here in Crescent Hill. There is some difference in places. I do not recall the exact details of this examination six years ago, but there is some difference between it

and the Crescent. There is ore in the beds and ore in the fissures. In the main the ore bodies of the Silver King lie at or near the contact of limestone and quartzite. The name "bedded vein" describes it, independent of the Silver King deposit. I would like to say that the main ore of the Silver King mines, as I have seen it, does come from what we usually determine and term as a bedded vein, lying near the contact of the quartzite and in the lime; but if I may go still further and say from my own know-edge of the Park City district, I have seen in fissures distinct and clear, so much larger ore bodies than I ever did see in the Silver King mine in the bedding.

A fair definition of a bedded vein is one which as it lies in the sedimentary deposit is conformable as to its dip and as to its strike with the sedimentary bed, and has continuity enough to constitute a vein. The main thing would be continuity.

I put that indication of shale in there simply to show this shale. I have never seen it right there where it is shown on the section, but further in in the limestone, further to the east, there is a very considerable formation of shale; and when I first noticed the formation I considered there was shale, probably more shale than there. That shale is simply put on there to represent the fact there is shale in that formation. I don't know just where or just how much; that is, on the other hand, there may be shale and probably is, undoubtedly is some in the formation on the hanging side where I have not seen it, but I happened to see it there. It is a part of the same sedimentary bed as the limestone, but it has no material significance, so far as I know. I simply have shown it because it is a fact.

I can see that fissure very distinctly indeed, going up above the Elephant stope, and I believe that it is what caused the subsidiary fracturing to the main Crescent fissure, and I would not expect its continuity downward to be very great, but I don't know. It might go more than a thousand feet to get, to my mind, the source of these mineralizing waters, but I don't know how far it goes, and I don't believe it would go over a thousand feet. It makes no difference whether it goes down one foot or ten thousand or ten million; it has nothing to do with it. It would still be a branch of the Crescent fissure.

At the Shields incline, in the Apex tunnel, marked in that incline, about 150 feet in from its mouth, the vein, a small vein is crossing the Apex tunnel, and at a point some 30 feet further in there is another. They are narrow; two to three inches. The course of them is about across the tunnel. In drifting on this you substantially cross the tunnel at right angles almost exactly to the side line of this Brave Columbia and the other claims. I asked Hans Johnson to take a sample to see what it would run. It was taken from the second of those fissures, that is the one furtherest in from the mouth to which I referred. There is another fissure further in the tunnel which probably, as you know, is parallel with and at about beneath these main workings there, and that is also parallel; but at no point, I can safely say, have I seen any vein at any point there or anywhere have I seen any vein running in

a northeasterly and southwesterly direction parallel to the side line. I have not seen any evidence of any vein other than I have spoken of anywhere within the limits of either of these claims, except deeper down. I have seen two veins back in the Alliance tunnel vertically beneath this, nearly if not exactly parallel with the Crescent vein in the Constitution.

Since the adjournment of court on Friday last I have visited the property in company with Mr. Blood, and examined the K. K. incline and the level, with a view of finding whether the ore on that ore zone connected with the fissure. The original working was a little stope laying on the lower or northern side of the K. K. incline, marked on this map by the letters "Stope." Between the period of my visit in January and last Saturday additional work has been done connecting this stope across the K. K. incline in a southerly direction a distance of 44 feet; the first 29 feet of the drift was through the lime bed and followed a streak of ore, the same streak of ore which had formerly been disclosed on the south side of the incline. It followed this streak continuously for a distance of 29 feet. At that point was reached the under side of the porphyry. The fissure of the Crescent on the under side of the porphyry through the porphyry the drift has been extended for 15 feet. This ore at the point where they started right at the side of the K. K. incline was 10 inches in thickness. It consisted of galena largely. The ore in the beds connected with the ore in the fissure. This sample marked "K. K. incline new work, February 3, 1912, ore in bed," is taken 3 feet from the side of the K. K. incline. This second sample marked "K. K. incline, new work, February 3, 1912," was in the Crescent fissure and was taken at a point 29 feet from the incline, at the point where the workings had cut the foot wall of the porphyry; the first sample was laying near the beds and the second one conformable with the Crescent fissure, in the Crescent fissure. Both samples are of the same character. The chief values lie in the galena and also a little zinc, with iron pyrites.

GEORGE D. BLOOD, being recalled, further testified:

I know where the so-called discovery point of the Brave Columbia, Constitution, Cumberland and Monroe Doctrine are upon the ground. I have visited and examined the ground there in the immediate vicinity. The bed rock does not crop out there. It is covered by wash; I don't know to what depth. I did not observe any workings which had gone down to bed rock anywhere in the vicinity of the claimed discovery point or reputed discovery point of either one of those claims. Under the discovery of the Brave Columbia the Apex tunnel runs. On the surface there is nowhere disclosed anywhere in that neighborhood the bed rock. The Apex tunnel discloses solid rock under the discovery of the Brave Columbia. I find fissures in the Apex tunnel north of the point marked here as the Constitution drift, and east and west drifts. At a point marked "Shields incline" from the Apex tunnel there is a fissure going

southerly from that point. It is rather thin cracks in the limestone and at nearly right angles to the bedding, and nearly at right angles to the sides of the claims. And then going southerly from that there are at least two other distinct cracks, and I saw a sample taken from one of those cracks by Mr. Johnson in the Crescent fissure, I would say about 25 feet south of the top of the Shields incline. I point to the top of the Shields incline, and there is the same fissure appearing some 25 feet from that point, southerly. They are all running in such a direction that they would cut the side lines of the Brave Columbia at about right angles approximately. Apart from these fissures that I have spoken of as found in the Apex tunnel and what we call the Crescent fissure disclosed in the east and west Constitution drifts. At a point about midway between the Crescent fissure and the fissuring just mentioned, there is another set of fissuring parallel with both of those mentioned. The fissures themselves seem to be very small, but several of them.

152 In the Antelope tunnel, at a point marked as the cross cut, the first cross cut south from Station 3 on the Antelope tunnel there is a cross cut run on the fissure which, if it continued, would cut the lines of the Brave Columbia, Constitution, Cumberland and Monroe Doctrine at practically right angles, and three other cross cuts are shown upon the map down to Station 2744, or in that neighborhood. All of those fissures having a direction that would cut the side lines of those claims at approximately right angles. There is a cross cut at Station 2742. The fissure is run on a small porphyry dike, the strike of the fissure being shown upon the map and the dip of it being approximately parallel to the Crescent fissure. With that exception I did not recognize any porphyry, but quartz is to be seen in the other fissures.

I don't remember about what surface exposures there are on the Cumberland except the small hole at the discovery of the Cumberland. I visited that in October in company with Mr. Wiley, and Mr. Brooks was with us at the time. The nature of the wash there is such that as soon as the timbers would rot they would become obliterated; not only covered with wash, but covered with vegetation. I don't mean covered completely with vegetation, but vegetation grows all over the surface of those claims. There is a growth of balsam in this neighborhood, and there is also some underbrush.

CHARLES P. BROOKS, being recalled, further testified:

I have heretofore testified that the portion of the stopes displayed upon the maps, Exhibit A and C. C. were platted from notes of survey made by Richard H. Browne. I have since I was last upon the stand made a separate platting from those notes of Mr. Browne which I used in platting those stopes upon these exhibits to which I have just referred.

Said plat was marked "Exhibit S. S., J. W. C." and received in evidence.

Witness, continuing: I present a pamphlet entitled on the cover "Instructions to United States Deputy Mineral Surveyors for the District of Utah, Frd. Salomon, U. S. Surveyor General, 1882." That is a manual of instructions that I received from Mr. Salomon, the then Surveyor General.

I also present another book entitled on the cover "Instructions and Circular of the U. S. Surveyor General's Office for the District of Utah, May, 1890," and entitled on the title page "Instructions to U. S. Deputy Mineral Surveyors for the District of Utah, May, 1890." It is an exemplified printed copy from his records and contains also his signature at the end, "Ellsworth Daggett,

153 U. S. Surveyor General of Utah." Those are the instructions that I received from Mr. Daggett when he was the United States Surveyor General of Utah, and under which I and other deputy mineral surveyors were operating. And that is true also of the other copy. The instructions contained in the one of 1882, issued by Mr. Salomon, United States Surveyor General, continued in force until the one I received from Ellsworth Daggett, Surveyor General, in 1890. The instructions contained in this book of May, 1890, continued to be the only instructions, so far as I know, until the instructions issued by George W. Snow, I think, about four or five years afterwards.

Mr. Dickson: We offer in evidence, first the letter from N. C. McFarland, Commissioner, dated April 27th, 1882, to Frederick Salomon, U. S. Surveyor General, Salt Lake City, Utah, which we obtained from the Surveyor General's Office, and which I can show by Mr. Andrews that they came from his office, and that this is an official letter, and unless you will admit it, I will have to wait and have him come down and testify.

Mr. Critchlow: I think we can admit that.

Mr. Dickson: Then I offer in connection with the instructions issued by Frederick Salomon and those issued by Ellsworth Daggett, the letter above referred to, including all that is mentioned in it suggesting additional rules.

The Court: Is there any objection?

Mr. Critchlow: Yes; your Honor, and while they are far too long to go through with them now, I think I know some of the things that are in them, and I do not see any materiality in them. I object to them upon that ground.

Mr. Dickson: I will state the purpose for which I offer them. We offer them not as a whole, but only for the rules and regulations regarding the deputy mineral surveyors. These rules and regulations after the execution of an order of survey of a mineral claim provide the method as to which the deputy mineral surveyor shall mark the corners of each location.

Mr. McHugh: I suppose that these will be subject to the same general objection, and I further make the particular objection that the regulations and instructions to the deputy mineral surveyors are incompetent to control the legal effect of a patent afterwards issued by the Government.

The Court: All of these are admitted in evidence subject to the

general objection, as to which I do not feel called upon to rule at this time.

154 The objection will be overruled.

Mr. McHugh: We will note an exception.

Said letter heretofore referred to from Commissioner N. C. McFarland to Frederick Salomon was marked "Exhibit T-T-3, J. W. C." and "Exhibit TT-4, J. W. C.," and is in words and figures following, to-wit:

"N."

Department of the Interior,

D. A. S.

General Land Office.

Wm. A. C.

Washington, D. C., Apr. 27, 1882.

Frederick Solomon, Esq.,
U. S. Surveyor General,
Salt Lake City, Utah.

SIR:

I have to acknowledge the receipt of your letter of Apr. 20, 1882, enclosing a copy of your printed instructions to U. S. Deputy Mineral Surveyors.

It is the intention of this office to issue very soon instructions to U. S. Surveyors General concerning the manner of conducting mineral surveys, by which you will be governed. Pending such time the instructions a copy of which you have forwarded will remain in force.

In this connection, however, I desire to call your attention to certain instructions already given, but which appear to be omitted from the copy sent. Reference is had to my letter of Apr. 3, 1880, requiring a particular reference in the field notes of a survey to each corner of the original location as marked upon the ground.

You are also referred to my letter of instructions to Sur. Gen. E. S. Davis of Nevada, of Jan. 26th, 1882 (Copps Land Owner Vol. 8 p. 189).

It is suggested that the directions contained in the above mentioned letters be incorporated in your printed instructions at once, as it is intended hereafter to require a strict compliance therewith.

Very respectfully,

(Signed)

N. C. McFARLAND.

Commissioner.

Recd. May 7, 1882.

E. H. H.

C. C.

The book of instructions issued by Frd. Salomon was marked "Exhibit TT-1, J. W. C." and the book of instructions issued by Ellsworth Daggett in May, 1890, was marked "Exhibit TT-2, J. W. C."

155 A. G. ANDREWS, a witness produced by the defendant, testified:

I have the original of this letter marked "Exhibit TT-3" and "Exhibit TT-4."

I am the chief of the mineral division of the United States Surveyor General's office of Utah, and have been for many years. The letter to which I refer is one of the letters on file in the office, I suppose; I don't know anything about that letter except as I find it. I have the original of which that is a copy. That is an original letter; one of the original files.

Cross-examination:

In addition to letters which are gotten out by way of instructions to all surveyors, directions given by the Surveyor General in particular to deputy mineral surveyors with reference to his work in any particular claim, are all considered by us of equal binding force and effect, and they are acted upon in each particular instance by the Deputy United States Mineral Surveyor returning the survey of his work; and it might be we would give special instruction in addition to the general instructions. There may be cases of that kind. That is frequently done, and this is by letter and sometimes oral; usually by letter though. But very frequently the Deputy United States Mineral Surveyor comes to the office and confers personally there with the Surveyor General or with the Deputy Surveyor General who has charge of the work; and that has always been so since I have been connected with the office, about 16 years.

The Defendant Rests.

Plaintiff's Rebuttal.

WILLIAM A. WILSON, a witness produced by the complainant, testified:

I was up at a point which Exhibit A shows the northwest corner of the Conkling mining claim, in October, 1909. I was never there before, that I recollect. I found there an old post lying upon the ground, marked U. S. 689, P. 3; also a small piece of a corner stake 2 x 4 standing up, but rotten in the end and set in a mound of stones, marked "U. S. 580 P. 3." This post that was lying upon the ground was simply lying upon the ground within a few feet of this other 2 x 4, and as I lifted it up to get the reading it broke in two. I brought it to town here; Judge Dey called up Judge Dickson and he said it was proper to bring it to town and brought it in.

156 I have those pieces here and produce them. Said two pieces of the post were marked "Exhibit 2, J. W. C.," and Exhibit 3 J. W. C.," and received in evidence. This [post] that I saw in the mounds of stones and marked P 3 * * * 580 was an ordinary 2 x 4 timber—that was a little short of those dimensions. I called [at] a 2 x 4; and [I-] was about 2½ feet long and set in

this mound of rock. I noticed also in taking it up and I saw the point of it was rotting in the ground.

FRANK ANDERSON, a witness produced by the plaintiff, testified:

I am a resident of Salt Lake? I am a mining engineer and Deputy Mineral Surveyor. I was at the surface point marked upon defendant's Exhibit A as the northwest [corner] of the Conkling lode Mining Claim, in September, 1908.

I found there the post lying down about 3 feet from where that point is marked a hewed pine post 5 inches in diameter, 5.4 feet long, hewed at the [top] on three sides, and scribed "U. S. 689 P. 3." I recognize Exhibits 2 and 3 of the [complainants] also found a sawed pine stick 11½ inches by 3½ inches, 1¾ feet out of the ground, in a small mound, marked and scribed "U. S. 580 P. 3." It was standing in this small mound of stones.

I am familiar with the field notes of the Pirate King as well as of the Conkling. The Conkling field notes call for two bearing trees at corner No. 3. Neither the place where this post was lying on the ground, nor the point where this other post was standing in the mound of stones, corresponded with the distance and direction called for by the Conkling field notes there in the official notes. The Pirate King field notes call for one bearing tree at that corner or post 3. That bearing tree is one of the bearing trees called for in the Conkling field notes. The post that I found in the ground and which I have described as being marked "U. S. P. 3 580" was not at the place where the distances and direction from the bearing tree called for by the Pirate King Field notes locates the point. There is no post at the point at which I would arrive by starting from the bearing tree marked with the Pirate King mark, and taking a course and distance from that bearing tree as called for in the Pirate King field notes.

Cross-examination.

By Mr. Dickson:

I found two bearing trees marked in the way described in the field notes of the Conkling, and one of these is also marked as a bearing tree for the Pirate King.

157 . . . Using the balsam tree which is marked both "U. S. 689 P. 3" and "U. S. 580, P. 3," running out to the position of the post from the call would make its position about 20½ feet to the westerly. P. 3 as claimed by the defendant I have indicated with a pencil mark in a circle. The figures 2778 are just to the northwest of corner No. 3 of the Conkling as marked on this Exhibit A. Drawing a line through that parallel to the west end line, it would place it west of where it is on Exhibit A. It would be 17 feet in the direction of the Conkling. Taking the pine tree according to the calls in the field notes for that call to post 3 and locating it, and drawing a line through that parallel to the end line of the Conkling,

it would fall about 3 feet, as near as I can measure it, to the west of the end line.

A paper, marked "Exhibit 4, J. W. C." in the words and figures following, was received in evidence:

Department of the Interior,

U. S. Surveyor General's Office.

Salt Lake City,
Utah, Nov. 11, 1889.

A. Jensen,
U. S. Mineral Surveyor.

Sir:

You are hereby directed to make Official Survey and return of the Conkling Mining Claim, located in Uintah Mining District, Utah, at the expense of the claimant. The Lot number for said claim is 689. You will make connection by actual measurement with the nearest corner of any conflicting or adjoining claim surveyed for U. S. Patent and with Mineral Monument.

You will make said survey strictly in accordance with the law and instructions and return the same to this office within thirty days from the date of this order or show cause for delay.

ELLSWORTH DAGGETT,
U. S. Surveyor General.
By G. P. NORTON,
Chief Clerk.

The plan map produced by the complainant and made by Mr. Anderson, was placed upon the blackboard, marked "Exhibit 5, J. W. C."

I have made certain surveys within the lines of the Conkling mining claim and other mining claims, and placed them upon the map which has been marked Exhibit 5. Those surveys were made at the request of the plaintiff company and are correctly platted.

There is work shown upon this map made by other engineers than myself. The Columbia raise, the K. K. incline, that part of the raise running up from the Hanauer tunnel, the Reimer's raise and levels, and Mahoney's raise, the small level, and the Johnson winze was work done by Mr. Knowlton, and that work is correctly platted on from his notes. The surface boundaries of the Conkling are placed upon this map, from the calls in the patent, beginning at United States Mineral Monument No. 4, running down to corner No. 2 and then the side lines and end lines from the calls in the patent. I have compared the map Exhibit 5 with the map Exhibit A in evidence, in reference to the surface lines. Of course, there is this material difference as to the westerly end line of the Conkling, Lot 689.—I simply surveyed the Hanauer tunnel from

Stephenson's cross cut. I never made any attempt to survey that, and there may be other cross cuts I did not survey. I simply surveyed the tunnel itself. There are cross cuts accessible that are not shown.

Mr. Critchlow: We offer in evidence Exhibit 5 of the complainant.

Mr. Dickson: Now, I will mention the portion of these instructions which I have heretofore offered in evidence and have been received, which we especially rely upon, and commencing with "Exhibit TT-1[", being the instructions issued in 1882 by Surveyor General Solomon on page 1;

The first paragraph;

Also the second paragraph;

Also the Fourth paragraph on page 2;

Also the fifth paragraph on page 2;

Also the sixth paragraph on pages 2 and 3;

Also the eleventh paragraph on page 3;

Also section (a) of the ninth paragraph on pages 4 and 5;

Also section d of paragraph 9 on page 5.

I also rely on the instructions to Mineral Surveyors of May, 1890, marked "Exhibit TT-2["] and referred to under the heading of Applications and order for survey, and refer to paragraph 7 on page 6.

Also on paragraph 8 on page 6;

Also to paragraph 12 on page 8; and

Also to paragraph 14 on page 9;

159 Also to paragraph 19 on page 10;

Also to paragraph 27 on page 13;

Also to paragraph 28 on page 13;

Also to paragraph 30 on pages 13 and 14;

Also to paragraph 36 on paragraph 37 on page 15;

And also paragraph 40 on page 17.

Mr. Dickson: I have referred especially to those that I mentioned, but they may be all considered in evidence.

Mr. McHugh: We now make a formal objection to the introduction of these instructions of the Surveyor General to Deputy Mineral Surveyors upon the ground that they are immaterial and incompetent, in addition to the general objection already made.

The Court: That objection will be overruled.

Mr. McHugh: We will take an exception to the ruling of the court.

A. G. ANDREWS, being recalled, further testified on

Direct examination.

By Mr. Dickson:

I have made a careful and thorough search of the papers and files in the United States Surveyor General's office in connection with the application for an order of survey [and survey] of the Conkling

mining claim, lot 689, to ascertain whether there are any special instructions on file given by the Surveyor General to Mr. Jessen. I did not find any such.

SAMUEL PERCIVAL PARKER, a witness produced by the complainant, testified:

My name is Samuel Percival Parker, age 30, business, mining, residence, Park City. I am related to Mr. Nicholas Treweek, the president of the Conkling Mining Company, being his nephew.

I am acquainted generally with the workings that have been heretofore described and as exhibited upon Exhibit A of the defendant. I have taken samples in the workings. I am familiar with this Exhibit 6, and helped to prepare it. The map was marked "Exhibit 6, J. W. C." and received in evidence. I am acquainted with the points indicated as workings as exhibited upon this map. The orange line is the fissure. I took samples from what is called the Constitution drift. I took the whole width of the fissure at intervals of five and ten feet, or wherever it was most convenient.

160 Sometimes I could not take it within ten feet of the right place, because the lagging was tight, but wherever it was most convenient I did so. I took the [whole] width of the fissure and picked down about ten pound samples which I afterwards bricked up and quartered down to about three quarters of a pound. Every point I took samples has been indicated upon this map. On the following day I then took them to the office of the Wells Fargo Express Company in Park City, and had them sealed in my presence where they were shipped to the Union Assay office of this city. I also sampled from the foot of Johnson's raise up 38 feet where the fissure showed itself. There are marks upon the map here indicating the points where those samples were taken. I took the samples sometimes ten feet and sometimes fifteen. I took out five or six pound samples and I put them in canvass bags, as much as they would hold, and they averaged about five or six pounds to the sample, and then I quartered them down to get them in a smaller quantity before sending them to Salt Lake City and packed them separately. I made no special selections in taking them along the line of fissure. The result of those samples as far as I know is shown upon this map, and these figures show the samples taken at the various points, and some at the foot of Johnson's raise. I also took samples in the raise from the Apex tunnel on the fissure, southwest of the Apex tunnel on the fissure, down the Johnson's winze to the Mahoney raise and the Antelope tunnel and along the strike of the fissure at the Antelope.

Generally these red lines here substantially at right angles to the Constitution tunnel East drift indicates the point where samples were taken, and along the red lines are the results of the assays shown. I took those samples by putting down my canvass bag and taking eight or ten pound samples and quartering them down, and putting into a sack of about three-quarters of a pound of fissure matter. Each sample was kept separately. I have the certificates of

the assayer for each of those samples, and those certificates have been placed upon the map.

Said assay certificates were marked "Exhibit 7, J. W. C.," and "Exhibit 8, J. W. C.," and received in evidence.

M. S. HANAUER, a witness produced by the complainant, of admitted competency as a chemist and assayer, testified:

I assayed the samples that are referred to in those various certificates, Exhibits 7 and 8. Wells Fargo & Co. delivered the samples to me. I think the date is stated or specified on the certificate.

Samples 1 to 54 were received January 12th of this year, and 161 samples 57 to 83 were received January 26th. They were wrapped up in a canvass sack and sealed and each sample inside of that. They were numbered as indicated on the certificates.

MAX BOEHMER, a witness produced by the complainant, testified:

I live in Denver, Colorado; am sixty-four years of age. I have practiced as a mining engineer for the last thirty-three years. I studied in the Polytechnical Institute in Hanover, Germany. I practiced my profession first in the eastern states, in the vicinity of —, in Illinois, with the United States corps of army engineers for the improvement of the Missouri and Mississippi rivers. In 1879 I went to Colorado and have resided there ever since, first in Leadville, and for the last thirteen years in Denver. I have practiced my profession as a mining engineer ever since 1879. I am familiar with all the mining camps in Colorado; in quite a number in Utah. I have examined a number of mines in the western states, the mining states of the west, also a few in Canada, British Columbia, Ontario, and Quebec, and in Old Mexico. For a [short] time I had charge of Stratton's Independence Mine in the Cripple Creek district of Colorado, and I have done quite a little mining on my own hook. In October, 1910, I made a short visit over the ground in controversy here, taking a running look at it for several days. I think I was four or five days upon the ground. The next was at the beginning of this year, and I probably spent two weeks at the work during this year. At the time when I made my first examination in October, 1910, the Columbia raise had been started and was up about 150 feet, as I remember it. There was pretty nearly 1,000 feet of work missing when I was there a year ago. Upwards from the Hanauer tunnel the workings were not connected through to the surface, at that time in October, 1910. It was not possible for me to go from the Hanauer tunnel clear up to the surface at that time.

The Park City district, by its underground workings to a great depth, show an immense deposit of stratified sedimentary rock, mostly consisting of limestones, although in a number of places there are quartzites, layers of shale, and other intermediate layers of either silicified limestone or impure quartzite; and they are the transition beds between the pure limestone and quartzite rock. This

in the whole square mile, I would say, that extends over the area in controversy, shows these stratified rocks to be dipping, as
162 a rule, over the entire mile to the northwest, at an angle of 15 to 20 degrees. In addition to the stratified rocks we find a few intrusions of igneous rock, not in great sheets parallel with the stratification of the limestone, but always, as I have seen it, in vertical or nearly vertical dikes cutting through the bedding planes of the limestone.

In the matter of ore I have observed two distinct classes of veins, one class being of regular fissures cutting through all the beds of the stratified rock and at all sorts of angles and dips, and another different class of ore beds of great extent of longitudinal and lateral formation approximately parallel to the bedding planes of the limestone and quartzite.

I took it, in studying the geology in that neighborhood, that the stratified rocks, as a matter of course, were deposited first, hardened into solid rock, and that later, after those stratified rocks had [hardened] there was some dynamic movement, no matter what the cause, which fissured these stratified rocks; that the fluid magna of the underlying molten rocks was forced into these fissures, and formed the porphyry dike which we find now cutting through the stratified rock. I take it that these had to harden and cool first before another movement created a number of later fissures, and those fissures were open and connected to the deep, and I take it, with the mineralizing waters which raised in them under the influences of heat and porphyry and deposited first the vein in the fissure, making the fissure veins of the present day; and these fissures, some of them, also supplied the ores that are found in the flat beds lying with the stratification of the limestone.

It is impossible for me to say what particular fissure supplied the ores for any particular bed of ore in the limestone that was found, but it is well known that the source of mineralizing waters of a bedded vein may be a long distance from the vein or from the ore in the bedded vein. I have seen it where it could be traced for more than 1,000 feet, where the source of the ore which led to the fissure and the lime beds were fructified and mineralized for more than 1,000 feet [away] from it.

I take it that the fissure vein, as I have described it, is a vein different from the ore beds in the limestone, as I have described them, because the vein of ore in the limestone has its own and entirely different dip or strike from the fissure which might have brought up the mineralizing water; it has different walls; it has different contents, because I have found that even in limestone in the same rocks where the mineralizing waters had deposited ore against the basset edges, in the fissure or in the fracture,

163 where I will say in the first place that nature seems to deposit ore of a different character than it does in the limestone beds found within the stratification. I therefore find a different ore in the ores that are deposited in the limestone with the bedding from the ores deposited in the limestone across the basset edges of it.

After all these veins or the ore had been deposited I believe it was probably under the ocean before the mountains were raised above the surface of the water, because there are thousands of feet of later sedimentaries deposited on top of these that we find in Park City, and the veins and ore deposits of the older rocks have not reached the upper rocks and are not found in the western country, as a general thing.

After the deposition of the ores there came a great disturbance, the cooling of the crust and the shrinking of the crust either by lateral pressure or dome-like uplifting, raised the hardened stratified rocks higher up and built the mountain. Such lifting was intense for thousands of feet, and in all mountain ranges we find that when a tremendous force is exerted on the rocks by the dome-like lifting or lateral pressure to its limit of resistance, they break necessarily; they would fracture for long distances, and at each fracture of any great length of necessity the rocks would part, one wall of the fracture against the other; that is, it would create a fault. One side of the fracture moved downward, the other upward, or vice versa; and these immense fractures are the main reason, the main feature found in the upbuilding of the mountains of the west and Pacific coast. We find them in this district, and I have seen I don't know how many fractures. At a glance I would determine of course by their contents, but more especially one great fault which exists in this immediate square mile in controversy, and that one great fault is what is called the Crescent fissure. It is not a vein in a sense that I would call it a vein; it is a fault fissure. I have seen it for the length of nearly a mile, I have seen it and followed it, although I have not seen it at every point, but I have followed it, and am satisfied that it is continuous from the surface to the Elephant stope, a depth of 2,000 feet. It is a continuous, strong, remarkably well marked fissure. Its outcrop, which is developed fully by the Constitution drifts running east and west from the Constitution, a small tunnel, shows its characteristic strike to that distance of 800 feet or more, which is about north 60 degrees east. It has an average dip in that development of rather less than the average of that wholly developed by the Elephant stope. Because of erosion of the surface, as is generally the case on a sloping hillside, rock greatly depresses any fissure from the surface, and in fact the action
164 of the atmospheric agencies also help to depress the line of the fissure on the surface as given here, and in these workings that is not more than 45 degrees, while the average of the Crescent stope is about 50 degrees, but the fissure has been followed continually along these workings, and at every point it could be seen it stood at an angle of about 45 degrees, dipping to the south, showing that the outcrop of it must necessarily be some distance north of the line of that drift.

The fissure shown there has no very solid walls, although it is of rock in place, but it can be followed by following a streak of mud, because the main filling of the fissure consists of a ground up mass from two to three feet in thickness between the walls of that fissure. I cannot call it any larger than two or three or perhaps five

feet, and I have had it painted five feet at the apex on the plaintiff's Exhibit 5, so as to be able to show it at all. I cannot see any reason why the outcrop should be painted as 50 feet in width as is done upon defendant's map. But the fissure is shown to be continuous up to the east line of the Brave Columbia, running north 60 degrees east on its strike, and being about 5 feet in thickness. It crosses the side line of these four claims located together in a bunch. About 100 feet east of that long drift in the Constitution tunnel there is a shaft about 28 feet deep within the lines of the Zephyr claim, just north of the north side line.

That shaft developed the same fissure and shows a similar dip, showing that the outcrop and apex of the fissure must be north of the Boss side line. From there on to the east on the Boss there is no work done to show what the outcrop of that fissure for a distance of 800 feet is. I cannot locate it by workings upon the surface at all.

At a distance of 800 feet to the middle of the Boss claim at the south side line of the Pinyon lode claim, there is an outcrop of a porphyry dike 72 feet wide, standing vertically on both sides, running in the direction of north 27 degrees east, a difference of 30 feet in direction from the direction of the fault fissure of which I have spoken, that can be used to feed the dike which accompanies the fault fissure. It is a different dike which I see. Where it belongs in the ground I do not know, but it certainly is not the hanging wall porphyry of the fault fissure. The outcrop of the fault fissure may exist at the east end line of the Boss lode. I didn't know that the Democrat tunnel was accessible, and I have not been down to it, but I noted the topography of that ground.

165 I know that the east end line of the Boss is about 340 feet lower than the point in the middle of the intersection of the Pinyon and the Boss claim. The fault fissure preserves its dip approximately for the entire distance to the east end line of the Boss, as exposed in the Hanauer tunnel.

This proves to me that the line of apex as painted on the defendant's map is an impossible thing. If the dip of the fissure is 60 degrees, and it has a difference in elevation of 340 feet between the points mentioned, the line of the outcrop or apex would be thrown 190 feet to the north and outside of the Boss claim; even if it dipped at 70 degrees it would be thrown 120 feet to the north. Therefore I say for the entire length of the Boss claim the apex does not exist in the claim as painted; it is all to the north of it, perhaps in the Buckey claim or in another claim, the name of which I do not know, except perhaps near the end of the east Boss and line, because I have heard that it exists there.

This strong fault fissure follows in a general way a porphyry dike which has a thickness of from 8 to 20 feet, as far as I have seen. It follows it, I think, because it was the line of least resistance. When the force created that fissure it kept the general course and dip of that porphyry dike, but not exactly. Wherever the porphyry dike was irregular, wherever it belled out, you will see there on the dip or on the strike the fault fissure cut through it and cut it away,

cutting through the dike, sometimes on top of the dike and sometimes under it, and cutting away slices 500 feet in length of porphyry, as proved by the later development in this 2000 feet of raising.

I have made some rough sections to illustrate the line of apex and the relative position of the dike and the fissure in the workings. I would like to put them up on the blackboard.

Sketch marked "Exhibit 9, J. W. C." was [places] upon the blackboard and received in evidence.

Witness, continuing: As we approach this ground either upon the surface or through the Alliance and Hanauer tunnels, we go from the east to the west, and it is natural in your mind's eye to see the fissure dipping to the west and the south on your left. It is for that reason I have made these sections the reverse of those sections of the defendant. It is more natural for me to look at it as a fissure dipping to the west, to the left, because you approach the ground from that direction. These five cross sections are along the line of the apex of the fault fissure at several points. The first one on the left marked No. 3 shaft, goes at right angles to the dip through the No. 3 shaft, which is near the west side line of the Monroe Doctrine lode claim. It shows the fault fissure in yellow, and the porphyry dike in green. At that particular point the fault fissure happens to be on top of the porphyry; it is cutting through the porphyry at some place to the east or west. The next section is taken at the same angle to the dip approximately near the mouth or entrance of the Constitution tunnel. It shows in the same colors, the fault fissure in yellow and the porphyry dike in green. At the apex tunnel level on that section the porphyry is missing. A little further to the east of this section there is a cross cut into the hanging wall for 75 or 80 feet and the entire tunnel cross cuts the foot wall, and there is no porphyry to be found. The porphyry has been sliced off and cut away and displaced by the fault fissure. This particular section also shows a fissure vein, which is shown and developed by the Apex tunnel—by a raise from the Apex tunnel near the surface into the end of the Constitution tunnel, following the vein all the way up, the first one very steep on the dip of the porphyry, and this not on the strike or dip there, but diagonally between at an angle of about 20 degrees, rising upon the fissure and then going up steeply again on the dip of the vein. That vein has been called the foot wall of the Crescent vein by the defendant. Its name in itself has nothing to do with the fault fissure or Crescent vein, or fault, whatever it is called. It is an independent fissure vein, differing in strike nearly 30 degrees from the fault fissure, and differing in dip 20 degrees from the fault fissure, and differing entirely in its contents. That small fissure vein, small as it is, has all the characteristics of the fissure veins of that district. It is cemented with vein waters; it has hardened and you can raise on it without timbering, which cannot be done in the fault fissure. It carries vein quartz, crystalline lead, and several metals. It is also in-

tersected, in my judgment, in the tunnel which is called the Antelope tunnel, which is 500 feet below the surface. It has not been actually connected by workings, but it has the same strike and dip and the same characteristics, and I think it is the same vein.

In the Apex tunnel that vein is shown in the drift across which I hold the pointer in that direction (indicating). In the Antelope tunnel it is shown in the workings which I point to with the pointer now. On the other section that is shown plainer. If that were the foot wall of the Crescent fissure vein it would be 200 feet away, at the elevation of the Antelope tunnel, and running away from it faster than that on the strike. It is an independent, separate vein entirely.

167 The next section is made at what is called the No. 2 shaft.

It has no special features to illustrate, except to show that the porphyry is missing for a long distance, and that at that point the outcrop of that fissure is north of the north side line of the Boss claim, the north side line being represented by the vertical line through the sketch. The same section, as shown, goes through the east end of a cross cut on the Constitution tunnel drift; the very eastern end has a small cross cut at the end. It is the point where the fissure leaves the Constitution drift, where the fissure goes into the wall of the drift and departs at an angle from the drift. That only is shown also to illustrate and prove that the porphyry dike, as well as the fissure, apexes to the north of the Boss claim at that point.

The last section represents a section of what has been called the porphyry shaft in No. 1 shaft at the Boss north side line. That is made according to exact measurement, and shows the same condition of affairs, that both the porphyry dike and the fault fissure continue beyond to a point north of the Boss north side line.

To describe the details of the workings more fully I have made another section of the raise.

A section marked "Main raise" was marked "Exhibit 10, J. W. C." and received in evidence.

Witness, continuing: This is a section of the main raise very nearly parallel to the section made by the defendant, but facing the other way like the others. It is made on double the scale, a little large so that one can see something. On that section that fissure vein I have spoken of crossing the apex at the Antelope tunnel is shown, and projecting it. It shows the distance it departs from that fissure at the elevation of the Antelope tunnel. This section is necessarily partly a projection, because the raise goes up with no offsets, but the projections were made not at right angles to the plane of section, but I have projected all parts along the strike of the fissure. If that is done then a distortion does not occur. It shows at the top the entrance to the Constitution tunnel, and in a grayish shade not very easily visible the actual raise and workings as they were from the surface to the Elephant stope at the bottom. It shows correctly, or as nearly as I can determine it, from what can be seen through the timbers—in a number of places it is difficult to see just what is be-

hind them—but it is intended to illustrate fully the relation of the fissure to the porphyry, the condition and dip of the stratification of the limestones and quartzites through which the fissure cuts.

168 Above the Antelope tunnel and up to the Apex tunnel in certain sections the porphyry is missing; it has been sliced away by the action of the fault fissure.

The same thing has occurred from the K. K. level down to what has been called the Engine drift; no porphyry is visible. Cross cuts have been made into the foot and the workings off some distance in the hanging, and the porphyry is missing, and the only explanation of it is that the fault fissure came along the general line of the porphyry dike and sliced off portions of the porphyry dike and removed it beyond sight.

Now I have described in the square mile nearly everywhere the limestone and all the stratified rocks dipping very uniformly, very evenly to the northwest, varying from 15 to perhaps 30, but their normal dip is to the northwest always at a slight angle. When we follow down this fissure at certain places where the developments have been sufficient so a man can see what has really occurred, it is plainly shown to me that the Crescent fissure is a fault fissure. Wherever the ore comes in contact with the fissure it has bent over, not the ore alone, but with the entire mass of limestone broken over from a northwesterly dip to in places a dip of 50 degrees in the opposite direction. Nothing but a fault fissure with a tremendous force could possibly do such a thing. Ore bodies are found in four or five different horizons. In some the development is such that you cannot tell how much further it extends, or the relation of it with the limestone beds and fissures, because not sufficiently developed, but where the cross cuts are made, where the things [is] done and open plainly, from which I could draw my conclusions, it is absolutely certain that the fault fissure in its action cut off the limestone beds and cut off the ore as with a knife, and that the hanging wall of that fissure is the one that went down; that is, it is a normal fault because the limestone beds and the foot wall are bent over to a startling degree, and the bedding on the hanging has been chawed up in the opposite direction. To illustrate that a little more plainly and fully I have made another little sketch.

A sketch marked "Exhibit 11, J. W. C." was produced by the witness and received in evidence.

Witness, continuing: These are rough sketches and they are made on a large scale so as to illustrate what I wish to say about it. They are made on a scale of about a foot to the inch, and they illustrate the actual occurrence and the relative position of the different rocks and ores in certain workings, which make me conclude that this is a fault fissure and not a vein. The first one on the left is a section of a part of the K. K. level No. 1, which is the first one below the Hanauer tunnel, the raise represented in the direction of the Chute raise going up at the contact of the fissure, where the fissure is again represented in yellow, and the porphyry

169

lying on top of it in green. The ore lies with the bedding, not in the normal dip, which is illustrated by an arrow to the right, which is northwest, but the dip is to the southeast of about 20 degrees, and the ore retains its relative position between the beddings of the limestone. As it approaches the fissure the bending continues and increases in degree until a lot of ore is pressed into the fissure and standing with the fissure. I saw a certain drift which showed me in this last section F a red spot, which presents ore that I would call a deposition, but it seems there are other cross cuts or other drifts at right angles to the east, and seeing the conditions there for 20 or 30 feet, the facts illustrated there are confusing as against the dozen small exhibits at the same places where you can't determine the facts.

Another small section which was made at some distance below this one, in the drift which was called F, I have shown that because it illustrates fully underground the ore in red coming into the end of the drift, not at the normal dip, as it was originally with the limestone beds, but in the opposite direction, of about 20 degrees, and then cut off by the fault fissure like a piece of cheese cut with a knife. There is no great bending there, but the fissure cuts through and cuts the ore off together with the limestone, bending them to 40 degrees at that point anyhow. In the same drift there are shown two yellow streaks which I interpret to be also fault fissures—that is a part of the main one. These big faults rarely occur on one fissure. Wherever there is a bending, either on the dip or in the strike of it, the naturally, in the nature of things, produce two or three fissures parallel, one moving 1,000 feet and the next one 100 feet, and the next 100 feet again, in different steps—they call it step faulting, a well known fault in all faulting, and to this fact, these step faults, I attribute as much as to any other cause, the grinding and the bending of the rocks towards that fissure. In a number of places in this fissure, and especially in the Elephant slope, the beds of the limestone remain normal; they are not bent over. Where this step faulting occurs, where the ground is cut in parallel thin seams, so to say, it has a chance to crush up the limestone and bend it. In other faults where this breaking and bending occurs is also that fracture moving with a tremendous force, and anything upon the foot would naturally bend, and thoroughly laminated rocks more easily than those that are heavily bedded, but both contribute to the cause of the crushing and actual bending and breaking of the rocks against the fault.

170 Following the fissure all the way down we find some striations of another strain, as I have illustrated on that section, only on a larger scale, until it finally enters the Elephant slope. There a large mass of ore has been mined which lies with the stratification of the beds of the limestone off to the north. That ore has been followed for 180 or 190 feet away from the fault, and wherever it can be examined now there is no sample of ore in sight anywhere; it is all taken out.

There is no sample of ore in sight at any of the breasts of the slope, but there is low grade ore at other places, and not only that

spot of galena but other minerals, and also of limestone that is mineralized and changed into solid galena, keeping on its course on the dip away from the fissure here, if not carrying galena or low grade ore even, will be mineralized enough to be called a part of that ore body and on its continuation open up again into ore possibly, as I have seen it—not here in this case—but in a number of other camps. I mean to say that the ore [beds] which is pay ore in one place and mineralized on its continuation and then going into ore again, is one continuous bed called a bedded vein.

Now, the contents of this fissure are remarkable, and convince me that the fault must have been a thousand or several thousand feet, because it is filled with a mass of ground up, finely ground porphyry and limestone, to a thickness I have rarely seen. It is characterized by that filling everywhere, everywhere except where the fissure opens to cut a vein of some kind. That fissure, even in a small fissure, even at the Constitution tunnel, has been cut off in that neighborhood, and where it has been cut off it is about the only place in that Constitution tunnel that you can find ores. I attribute the value to the cut-off of that fissure more than to the original contents of the fault fissure, and so assays surely can be found where a vein and where the ore has been dragged into the fault fissure, but it can be also found in other places by carefully looking.

That is thrown by the atmospheric agencies and by erosion on top of the hill. There is a dissolving of the metals in the vein, most of it being carried away [—] the waters, but a great deal of it filtering down into the vein, in fact, enriching to a certain degree the vein itself, as a rule. It is a well known secondary enrichment.

Now this ore, this vein having no ore within it except where it has cut some other veins, it is rather difficult to find any ore than where you can get any assay value, but some of it has filtered
 171 down, migrated from one place to another. So that assays can be had in certain places, if you know how to look for them, but if you take a general course of samples in an unbiased way you will get nothing out of that mud—and it is nothing but mud that fills that fissure, except in places where the ore is dragged into it. I would conclude, as I have described, that the fissure veins and the ore beds in this district existed first; that later the mountains were lifted and the fault occurred, and that this is one of the master faults of the district which cut through the mountain indiscriminately and went along the line of the porphyry dike, which was a line of weakness, but it did not follow it exactly under the porphyry or over it, but slashed through it wherever it bellied out, and that is where we find ore [dragged] into that fissure. It might be called a vein, although in my opinion it could not be called a vein, because I know of examples—I have seen many of them—in the old Comstock was an example of it. The old Comstock at its outcrop was a placer claim before the vein or lode was discovered at all; and any of the gold which worked its way downward, down the hill and filtered down into the joint planes of the rocks below, would in my opinion not make a vein of that particular joint plane. In the same way the fault fissure that has never been mineralized, and

only ore been dragged in it, should not be properly called a vein; but if it is called a vein it is certainly of later age and entirely distinct in the character of its filling from a bed of ore, which must, in my opinion, be called a separate vein.

Going down the K. K. incline, which is in the foot wall entirely and limestone, there was intersected a bed of ore which was followed in a northwesterly direction for 20 or 30 feet, and which lately, I understand, has been followed in the opposite direction towards the fault fissure.

I have said that the veins, fissure veins as well as bedded veins, existed long before the faulting occurred; that the porphyry dike was intruded first into the sedimentary rock; that after that a fracturing which led to the formation where the vein occurred, that much later a faulting of the fissure occurred which cut off these beds entirely. The ground is soft and the slickensides in places do not fully tell me whether there was any lateral movement from left to right. I don't know whether it was a vertical movement entirely or whether it moved laterally. It was a great displacement, in my judgment. The amount could be found out by a close examination of the entire district, and a correlating of the different rocks where they belong with each other, but it is quite a difficult matter 172 and requires a survey of the entire district to be sure of that.

I have been in every place in the Elephant slope that I could get in. Even a year ago I was in the upper slopes two or three sets high, as I remember it, but they said I could not go into the first or second set then, but I went to the end about 150 feet, and I could observe it to the most northwesterly end in the bottom.

I have seen impure quartzite in different levels in the upper workings, and clean quartzite in the Hanauer and Alliance tunnels where the outside side of the fissure was limestone; quartzite upon the foot, with limestone on the other side, and often shale on one side and lime upon the other, which juxtaposition also proves a faulting along that line, not of any extent, but it proves the faulting. I think it has no further importance.

There is a recognized process of deposition known as replacement. Replacement of the country rock is a substitution of one particle for another, of the original country rock by mineral; that occurs not only in the beds but it occurs also in the fissures, in any rock, most particularly though in the limestone, because it is more soluble and more easily altered. I found in the Elephant slope no evidence whatsoever that indicated to my mind that any of the ores were formed by mineral solutions which came from the Crescent fissure. They were practically butting against the Crescent fissure and the limestone ore beds, but not vertically so far as any evidence here shows.

Cross-examination:

In my conclusion at which I have arrived, in this Crescent fissure there is no ore at all except what has been dragged in, or which has come there by infiltration and leaching down from the upper levels. I can point to a number of such places. It was more plainly to be

seen in the K. K. level No. 1, shown on my section Exhibit 11, the left hand section. In all the places where the developments were made below the K. K. level No. 1, there is ore that stands against the fissure. I have seen it at all points where the developments were made along that Long raise.

The Crescent fissure is a persistent and a very large fissure. We follow that fissure wherever it appeared in short intervals in the foot and hanging wall side of the fissure continuously from the Alliance tunnel—from the Elephant stope to the surface. I have seen twenty or thirty fissure veins which might have contributed to the deposition of the ores, or might not. I have not found any fissure
173 through which I believe the solutions flowed which deposited the ore that is now found in the Crescent fissure, or in the beds. I would not point my finger to the one that brought the solutions into the bed. I have not found the one, through which, in my judgment, the solutions flowed. I think it is absurd to look for the one fissure, which created all the ore in that place. It is impossible to determine the exact source from which those ores were brought up. Each separate lime bed would furnish a separate distinct vein.

NICHOLAS TREWEEK, a witness produced by the plaintiff, testified:

I am a resident of this city, and have been for a great many years, and have been engaged in the mining business nearly forty years. Am President of the plaintiff company. I have known the Park City district since 1880 or 1881. I began mining in that district at that date, in the east part of the district. I have not received any technical education as an engineer, only from books that I have studied myself, and by experience. I have in the course of my mining operation picked up a practical knowledge of engineering; so that I am able to make surveys and produce them upon maps.

I began mining in 1881 for the Walker Brothers in the east part
Lowell

of the district, known as (Walker and Buckey) mine, opened that property and developed the property, and soon after that, I think the next year, I went on Crescent Hill in the vicinity of the old Pinyon and Pinyon Extension and the Walker-Buckey, and organized a company there known as the Climax Mining Company. I was the vice-president and manager of the company and the actual manager of mining operations on the ground. I continued my work on the Pinyon Hill in the Climax mine, or in connection with the Climax Company, I think about two years altogether, until it became involved in litigation. I left that region for a period after we had had a compromise and organized the Crescent Mining Company, and put in all our conflicting interests and formed that company with six hundred thousand shares of stock and taking up other properties besides. I afterwards did become interested in other properties. The Alliance mining Company, I had the direction of that. That is one of the companies that finally went into the Silver King Coalition

Mines Company, when that company was organized about four years ago. The Alliance Mining Company took over the property of the old Sampson Mining Company, I think, about 1889 or 1890.

174 I had to do with the running of the Hanauer tunnel and the Alliance tunnel. The Hanauer tunnel was run from its portal on in quite a distance by the old Sampson Mining Company, and run in a northwest direction for about two thousand feet, and they were nearer the fissure at the mouth of the tunnel than ever they were afterwards. Then the work was directed to the left so as to pick up the old Crescent fissure, and after that was done this work was continued in a southwesterly direction on that fissure practically to the southwest end line of the holdings of the Alliance Company, say about fifteen hundred feet.

I recommended to the Sampson Company the line of work which was carried out, namely the extending of the Jones tunnel which comes to the surface, and followed the fissure quite a long distance. My connection with the Alliance Company was I broke the first piece of ground with a pick, or myself and John J. Daly in the locating of that tunnel which was known as the Alliance tunnel. I had the actual oversight of the running of that tunnel from its portal for a portion of the distance, as vice-president and general manager of the company. We run it in a short distance, and then the contract was given to Mr. Keith and Mr. Judge, and the distance, I think, was something like four thousand feet. For that distance of four thousand feet that was a straight extension of the tunnel. After the tunnel had reached that limit, we then took up the work of the company virtually under my direction and management. We run then to a point 4,882 feet, to be exact, and then a turn was made in a southerly direction and we run on a tangent, that is in a southerly direction. I cannot get the exact points of the compass—a distance of nearly 600 feet, where they intersected the Crescent fissure. Exhibit HH correctly shows the course of the Alliance tunnel from its portal or the forty eight hundred and odd feet which was run on the tangent. That would be at station 1134 on the lithographed map, which accompanies Captain MacVichie's report in December 1908. That tunnel was run, according to the map, within about sixty feet of the southeast side line of the Conkling claim.

The Hanauer tunnel is also shown upon this Exhibit HH. In about three hundred feet from the mouth of the Hanauer tunnel a cross cut was run to the left as shown upon this map, a distance of approximately four hundred feet, and that cut the Crescent fissure. As the result of that cross cut it demonstrated the fact that this large amount of work here going off to the northwest has been wasted and thrown away. Sixteen hundred feet of the Hanauer tunnel had been done before this cross cut running off to the southerly here was completed. After that work had been done and determined.

175 in my opinion, that the fissure had been cut, here in this cross cut, then this drift was turned to the south again and intersected the point Station 34 on Exhibit HH; and then continued in a general southwesterly direction to about Station 56. From Station

34 in the Hanauer tunnel where I struck the Crescent fissure, up until the vicinity of Station 56 and beyond the fissure, it was under my observation as being in charge of the work.

In the Alliance tunnel I should say about four hundred feet south-westerly from the cross cut was run along the Crescent fissure, and then we struck a large flow of water and the direction of the drift was diverted to the right and in the foot wall country, all of which was to keep away from the flow of the water that we encountered in there; and then after that, after we passed this flow of water I don't think that the extension of the tunnel was in the fissure for a long ways to the southwest, if at all, but we run then this cross cut from this tunnel over to the fissure in a southeast direction, so that we kept in close touch with it all the time by these cross cuts. I was able at the time when I ran these cross cuts to satisfy my mind that I did see there the Crescent fissure. The total length of that work was nearly two thousand feet.

It was developed some further east by a small shaft sunk near the mouth of the Hanauer on the surface, but not in the Alliance tunnel,—something like two hundred feet and something east from the mouth of the Hanauer tunnel, but at no other point, on that line of work from the Alliance tunnel. I have examined most of the workings which are displayed upon the maps in evidence, so far as they are accessible, within the limits of these maps in the Crescent fissure, and from my examination and knowledge of what is called the Crescent fissure as developed in the Hanauer tunnel, and for a distance approximately of two thousand feet, as I have described, in the Alliance tunnel. I think there is no question about the identity of the Crescent fissure in these various workings. While it is not fully developed, it is so close to the line that it has established its identity.

The filling of the fissure at the various places where I saw it is fractured soft material, carrying a great deal of clay and mud, and it would be very difficult to carry on the work, particularly if you are raising on it, without getting into serious trouble in the way of caves. So that it was necessary in the extension of this Columbia raise to keep away from the fissure, to keep underneath it, so as to get these connections through. If you would undertake to raise on it, why, it would be liable to run down, or slide down on you, as was

176 demonstrated in the Mahoney raise when they were raising on the fissure at a given point on the section, they lost a part of the raise which had been done at one time and run out southwest a short distance, to start a new one. It is a very difficult matter to raise on that fissure.

Q. Now, in respect to that particular cross cut, how did that compare with the Crescent fissure as you have identified it along the line of the Hanauer tunnel where it is found, and in the Alliance tunnel where it is found?

A. The only difference was in the Alliance tunnel where we intersected the fissure I did not find any porphyry there, and for a considerable distance westerly there was no porphyry, and so we only extended the cross cut into the hanging wall country for a distance of eighty or ninety feet, of where porphyry is found as the filling

is a crushed lime, clay and mud, and partakes of the country of course which surrounds it from its wall.

There is mud in the fissure all the way in the Hanauer tunnel out where we run along it, and in what is called the Crescent fissure as developed in these workings under consideration. There is very little difference in its appearance as to the distance that it runs there; it was continued after we got through with it clear on to the top of the K. K. incline. Its characteristics are about the same as it was of this muddy clayey material. I have no doubt but what it is the same fissure in other places. Taking the Hanauer tunnel from the place where you first struck it, after I had made this detour to the southerly and struck it at station 34, as described, from there on for the whole distance which I ran in the fissure, it did not produce any ore. The only mineral indications were more or less stained clay, with a reddish appearance, but it was illusive and deceptive as to ore; it lacked the cementation and the banded structure; it partook of the surrounding walls and there was nothing in the way of crystallization. We did not find enough fragments or occurrences of ore to make an assay on that piece of work; I don't believe, put it all together there was five hundred pounds of ore taken out.

Either one or two raises were put through; I think two, along the fissure upon its upward course.

One was put through from the Hanauer tunnel to the Jones tunnel, a distance of upwards of three hundred feet. Also connections were made at a point further west that I would call at or near the main working shaft of the old Sampson Company. The distance and elevations will show upon the map. In these raises I followed the fissure, and occasionally nodules of ore would be found, but as a permanent producer, it was a failure. In going up with the
177 raises we were in the fissure practically all the time. In places it is narrow and other places it has a width of four or five feet, and other places it would be down to a two or three inch seam. We did not reach any bodies of ore in the bedded country. We found no ore in going up these raises, except, as I explained, a nodule here and there, sufficient to get assays out of.

(Exhibit 12 was offered in evidence.)

Witness, continuing: Exhibit 12 is a map of the workings of the old Sampson Mining Company, and also including a part of the work that was done by the Alliance Mining Company. The workings of the company were all of the extensions of this intersection of the Hanauer tunnel with the Crescent fissure at or near station 41 marked "turn table," and "cross cut." It was a cross cut running northwesterly of the Hanauer tunnel following the direction I am now indicating, from station 31 to station 32 and station 33 and station 34 where it intersected the Crescent fissure. That is the same place near 34 as is marked on Exhibit HH, the lithographed map. Upon this map is also shown the cross cut which we ran over for exploratory purposes to find the fissure. There is upon this map also a line drawn in pencil

or ink, passing through a shaft which is practically southerly or southwesterly of the engine house, and which extends through the end of this cross cut of which I have spoken, and which is a continuance, passing through and beneath corner No. 4 of the United mine or the Grand Prize, and is continued on and ends in what seems to be a continuation of the Hanauer tunnel. That line was very lightly placed there by myself many years ago to illustrate the strike and dip from these main points as established by the workings described where the cross cut reached the fissure, and also at a point marked "shaft" at the surface. That would indicate that a distance of near three thousand feet, or thirty five hundred, the ore in twenty-six hundred feet of which is [trascable] at that level, and the position of it at that level, and from there on it is apparent that the Hanauer tunnel is indicated on the map. The line of working shown is partly following the fissure. Further east at a station on this map which is 73, is a cross cut marked "Stephenson's cross cut." It was run during the progress of the work. In the Hanauer tunnel in a southwesterly (easterly) direction, which I have just been describing on the fissure, we ran into the hanging wall of the fissure, practically two hundred and sixty feet, the general purpose being to investigate the country alongside of it and see what there was in it. In that fissure, and in that cross

178 cut at about station 78 there are represented by some pencil marks a number of places, and there is shown a fissure for fifty or sixty feet across and crosses a drift and in one of those fissures there is some very good ore. That fissure does not resemble in any manner the Crescent fissure along which the Hanauer tunnel is driven at that point.

Exhibit 12 at the termination of the work which is indicated here, represents a termination of the work as we carried it on, that is, near that point, near the southwest end line of the company holdings, which included these claims, which were "Chief of the Park," "Sampson," "Grand Prize," "Jones," together with the claims on the east end. Jones tunnel, which has been spoken of, and which is in part represented on Exhibit A is shown on this map, Exhibit 12. While not marked, it is upon the westerly or southwesterly end of the Sampson No. 2, Lot 89. Jones tunnel runs along the Crescent fissure after it gets in a distance of about a hundred and thirty-five feet to station No. 23 (or 33). This drift was run pretty well outward, strange to say, from the shaft in a northeasterly direction, and this bend is where it comes out to the surface. It was not really run as a tunnel.

Between what is marked as the Whim shaft on the southwesterly end of the Sampson and the apparent portal of the Jones tunnel. It follows generally the Crescent fissure, and pretty generally the fissure which was left at this point between Stations 29 and 51. I think that is it. I was called in as a doctor to see what the trouble was as to this long tunnel intersecting this drift. The tunnel is run entirely on the fissure. I was not in the mine and connected with the management at the time that this so-called Jones tunnel was run. After I became identified with the management of it, I

had occasion to make careful examination of the work called the Jones tunnel. There are two beds developed, one in the Jones tunnel and another one in the level above which I never saw, but the north one, Norman's stope, I am familiar with that. The one south of the one of which I speak and am familiar with, I saw a flat bed of ore in that. When I was put in charge there, I became familiar with and observed the occurrence of ore with reference to the fissure; it is pretty near station —, if my recollection serves me correctly. I am inclined to think that the stope extended out further northwest than is shown on the map, and yet it may be correct. I was not familiar with the stope apparently shown above that, marked "Saunders stope," but I understand it was a flat bed of ore there. Going along this Jones tunnel further towards the northeast to its apparent portal, there were no other bodies
179 of ore touched or developed or observable, nor any indications of any kind of ore, merely the filling as heretofore described of clay and mud.

Indicated upon this map, but hardly visible because it is quite faint, are workings of different kinds laid out in pencil only. They were put on the map, if my recollection serves me correctly, from surveys made by Mr. Brooks, and I am inclined to think they were made by James W. Moffat. I have been through the workings apparently represented on the foot wall in lead pencil on the map, but I have no recollection and familiarity with them, that I could describe them with any particularity.

On the claim marked "Chief of the Park" were the hoisting works and engine house, the name given of the Sampson Mining Company, and its shaft. It was a vertical shaft. What is shown on the map as the Van Praag incline raise ran down into the Crescent fissure, if I recollect, similar to the manner the K. K. incline would be run, also I think, it followed the fissure, that is, it went down in it. It would be with the strike and dip both. When the Van Praag incline followed the Crescent fissure, I cannot give any description as to whether we were in ore bodies. I cannot give any further description of any of the workings which run down from the old Sampson workings into this Crescent fissure. It is upwards of twenty six or twenty seven years ago since I have been in the Sampson workings. I recollect a connection between the Hanauer tunnel and the Jones tunnel which is marked upon this map "Connection raise." I have been through it. That raise is in the Crescent fissure. It did not develop ore. I recollect a raise that was sent up from the Hanauer tunnel from the easterly extension of it, as shown upon this map, [" "] marked "East Drift." A connection was made at some point easterly somewhere in the neighborhood of the Stephenson cross cut, but just where I can't tell. It may be in the neighborhood of station 75. I can't locate it. I know there is a chute there which shows in the drift with copper sulphate in it. That may be seen. It ran up to the connection in the fissure in the Jones tunnel. It contained practically the same class of material the fissure is filled with, but no ore was developed.

(Photographs marked "Ex. 13, Ex. 14 and Ex. 15["]", offered and received in evidence.)

Witness, continuing: Exhibit 13 is a photograph taken from a position here looking west of north, as shown. The camera was placed about the middle of the northwest side line of the Arthur claim, which joins on the east the end line of the Conkling, and looking to the northwest to take this photograph. Calling attention to this Exhibit there will be seen the Pinyon Hill ridge, running almost northerly and southerly, and down on the other side northwest corner would be standing. This is the portion that dropped off to the southeast and would leave the Boss down here some where about three hundred and twenty or four hundred feet below this ridge. The old Sampson working is still a little further to the northeast here. At the top there is a monument standing, which is United States mineral monument No. 4, at an elevation of 9200 feet, I think. Underneath that point is the discovery point of the Walker and Walker Extension mine. The Pinyon and Pinyon Extension practically cover a long part of that ridge. They generally follow it quite a long distance and the Walker and Walker Extension along the side of it. These openings here are openings in the Crescent mine, the apex cropping out to the southeast and showing beds of rock dipping down to the northwest; coming in from the other side would run above that bed and continued on up, it has picked up what is known as the Crescent fissure which dips here to the southeast, whereas the Crescent vein dips off to the northwest. I have written "Buckey tunnel" at the portal of the Buckey tunnel. These are the dumps from the old Pinyon workings and there are the tunnels that were run along to this point. This point, where there is a road across, is the porphyry dike referred to. On Exhibit 14 the porphyry dike shows and can be seen where standing it is extending vertically with the quartzite as I call it on each side, frozen to the dike. It can be plainly seen that it is standing in a vertical position at this point, marked "P. D." for porphyry dike.

This photograph, Exhibit 14 is taken looking a little east of south, so it shows these workings pretty well over together out of their position and relation. It is putting it together just as much as Exhibit 13 throws it away. The position is shown incorrectly by the [photograph] from the position taken. It is thrown together just like you would throw in a projection in the workings. The camera was standing.

(For the purpose of locating the point where the camera stood in taking the three photographs, a map marked "Exhibit 16" was offered and received in evidence. The witness marked on Exhibit 16 the various points identified by him as the points at which the camera was placed in the taking of the three photographs, and the positions were marked respectively, 13, 14 and 15.)

Witness, continuing: On Exhibit 13 an opening shown about the center of the picture which is marked with a red circle and
181 the word- "W. W. Ex. Disc." for discovery; that is the discovery stake of the Walker and Walker Extension. A post is to be seen at the discovery. A dump at the left hand of the picture showing white in the picture, is the point where the tunnel run in, but it is all caved, but near that mouth there appears to be an old stake which I suppose is the discovery stake of the Buckey claim.

(The point was marked "Buckey Disc.")

Calling attention to Exhibit 14, the Porphyry dike is marked "D." The claim that goes through the side shown just above and to the right of the Porphyry dike is at the intersection of the south side line with the northwest side line of the Boss—the south side line of the Pinyon and Pinyon Extension claim. At the left hand of the photograph where the dump appears, is the Buckey tunnel, marked "Buckey." The photograph shows the dip of the lime beds to the north; the [stratification] shows here. The outcrop near the center of the picture and just below a tree appearing above the horizon is the outcrop of the vein; the mountain shown that lies over to the south and southwest is called "Tyree Peak" and was referred to by Mr. Wiley.

Exhibit 15 as indicated upon Exhibit 16 is taken from the mineral monument No. 4 shown upon the maps. The line in which the camera was pointed looks easterly. The foreground of the picture is a depression a considerable distance below the point at which the camera is placed. Where it is marked "Sampson" and the white dump shown on the picture marked "A" represents the top of the Sampson vertical shaft and the lime lying around the building. On the old Sampson map it is marked "Engine House." It is also marked on the old map "Whim shaft," I think; at any rate, the workings on Exhibit 12 marked "Whim shaft" at the southwesterly end line of the Sampson is the same shaft, I think; they are close together, and both would possibly be about that point. It indicates on the fissure itself that it appears to be a shaft. Exhibit 15 also shows the mouth of the Hanauer tunnel. The K. K. Concentrating Works were at the mouth of the tunnel. The mouth of the tunnel comes out at a point just a little above the bottom of the mill, and shows by contour lines the old Fairview dump and quartzite that you can recognize as being the foot-wall of this vein at the point marked "F," meaning Fairview dump. From that point to the right and south is a little ridge coming down to the mouth of the Hanauer tunnel; also the mouth of the Alliance tunnel running in a westerly direction towards the Hanauer tunnel, and in the distance you see the Bell shaft and to the left of that a short distance, is the Ontario mine.

182 Exhibit 17 was drawn by me to a scale of 50 feet to the inch, and is made to represent a cross section through the line of the Aetna tunnel north 32 degrees west. It represents the dip approximately of the Crescent bedded ore body; also the dip that

would be in a northwest direction, also the dip of the Crescent fissure from the Hanauer tunnel up to the Buckey tunnel of the Buckey claim. At the westerly edge of the map and above the contour line, another working is indicated as though it were projected. It is shaded and marked "Porphyry dike" and represents the "Porphyry dike" referred to, from the intersection of the lines of the Pinyon and Pinyon Extension and the Boss.

It is projected into this section 150 feet northeast. At the lower left-hand corner of the map indicated by yellow, shows the Crescent fissure where it connects with the Hanauer tunnel. This section I made from Mr. Brooks' map used in evidence, a copy of which was furnished me. The vertical distance between the Hanauer tunnel and Level No. 3 of the Crescent workings, level and shaft, is 65 feet. The vertical distance between No. 3 and No. 2 is 76 feet, and between No. 2 and No. 1 is 87 feet. The vertical fissure between level No. 1 and the Aetna tunnel is 105 feet, and the vertical distance between the Aetna tunnel and the Boss level No. 1 is 97.6 feet. [The] vertical distance between the Boss level No. 1 and the Boss tunnel level is 72.7 feet, and the vertical distance between the Boss tunnel level and the Buckey tunnel is 97.6 feet. A section taken down through to the Hanauer would cut all these tunnels in going, as the plane shows them extended to the southwest, so that the tunnel is represented on a section merely by the eye; that is all you can see of it on the strike. It would intersect these various workings of the Aetna tunnel, Boss tunnel and Boss level as indicated upon the Brooks map, Exhibit A. I think possibly at the Buckey stope that is beneath the ore body at the elevation point 2395.1, this section would cut the Crescent fissure. The station numbers are thus represented on Exhibit A, where it shows elevation 2395.1 or station 152. The average dip of the fissure as shown by the red line on Exhibit 17, is 67 degrees, that is, between the Buckey tunnel and the Hanauer tunnel; in that distance it is 67 degrees, and the distance is about 14 inches or 700 feet, on the hypotenuse of the angle of the dip. If the fissure continued to the surface on that average dip, it would outcrop 100 feet northwest of the southeast side of the Buckey claim.

I am familiar with the appearance of the ground of what has been spoken of and shown upon these exhibits as the porphyry dike. It is not connected in any way with the outcrop on its strike of the Crescent fissure. I say it is not connected with the Crescent fissure, because it is geologically impossible, unless it should intersect it upon its dip as it went down into the earth. We put up a raise possibly 100 feet northeast of the northwest side line of the Conkling claim. My recollection is it is up about 240 feet. That was put there for the purpose of cutting through the lime bed to see if we could find any beds of ore or veins of ore to the north of that. I am not sure whether it was put up in the fissure or in this hanging or foot wall. I think, however, we started here and found the fissure and may have cut it on the dip, because it goes at a pretty steep angle, about 70 degrees, but my recollection is not clear. In none of the workings we did in the Alliance tunnel, or in

any of the cross cuts from it, or on the Crescent fissure, or in any raises from the workings of the Alliance tunnel, did we strike any ore or deposits of ore.

I am familiar with the Elephant stope and the workings in and about the same, and have made surveys and examinations a great deal at this point, and have reproduced those surveys upon the map, Exhibit 18, and the results of the surveys and my examination have been placed upon the map correctly. The map is 30 feet to the inch, being larger than the scale of those heretofore used.

Calling attention to Exhibit 18 and to the Elephant stope, the stope is approached by the Alliance tunnel rising at station 353; we then pass along a southeasterly direction to the cross cut known as the McKay cross cut; that is continued on through stations 354, 355, and to station 356, at which point there is a winze. Fifty feet northwest of Station 356 a drift has been run in a northeast direction, shown on this map as the Snuff drift. Continuing on southwest the ore body is found at this point and the drift then goes out on the red line to Station 365, and follows on around to Station 350. A circle is then made back from 350 to 357, or back to a point 350 feet in the level, and in coming back in the winze from 350 to 357, we first intercept the porphyry dike intrusion dipping to the southeast. That fissure has been followed down for a long distance, indicated by the plat, from 360 southwest, of 150 feet, and is crushed in on account of the heavy ground at that point. We can then follow along running to the northwest again, from 360 to 362, 473, 474, following a cross cut from 474 to 475, we are in the ore body, and at 475-a, a point about 30 feet northeast of Station 475-a, there is an incline going down on an angle of about 13 degrees, and runs down about 60 feet; then a drift is run in a direction about northeast for 30 feet, which again circles around. All the workings from Station 473 around as I have indicated, are in a very extensive bed of ore. The ore is stoped up from the bed at least 30 feet in 184 height. The bed of ore extends back in a southeasterly direction and is found above Station 360 about 30 or 35 feet, and continues down to the point shown on the map marked "Ore" for a distance of about 175 to 180 feet. The depression in going that distance would be about 40 feet, the hanging of the bed still carrying ore, and is still going on to the northwest, so that the limits of the ore have not been reached by any means.

In the face of the drift marked "Ore" on the map, there are eight or ten feet of ore, and at least three or four feet is heavy galena, first class shipping ore.

Returning to Station 353, about 75 feet south of the same, we cut a fissure marked No. 11, which goes north 15 degrees east, and is two inches wide and has a dip to the southeast of sixty degrees; it is well defined and the details are marked on the map. Passing on about 75 feet we intercept fissure No. 9, which has a course north 15 degrees east, and is about six inches wide and has a dip to the east of 55 degrees.

Going to the southeast a distance of about fifty five or sixty feet

we intersect fissure No. 8 ten inches wide, and that is dipping to the northwest at about 60 degrees.

From station 355 to the southeast about 60 feet we intersect the fissure which has a dip to the northwest of about 70 degrees. It is No. 7 and shows six inches of clay. I have noted all of this upon the plat. Going to the southeast of No. 7., we intersect what I term the No. 6 fissure in conjunction with the Snuff drift. This drift up to the point indicated by the beds here to the right, is run on the fissure. That fissure has a dip to the southeast of sixty-five to seventy degrees carrying ore plainly to be seen, and carrying ore in the face. No. 5 fissure has a course of north 60 degrees east and is about seventy-five feet southwest from station 350. It is a vertical fissure and carried ore. We then come around to station 360 and we find a fissure with a course of north 15 degrees east, carrying clay and ore. We then come around to station 362 plus 40 feet. We have a six inch fissure there with a course of north 47 degrees east, and dips to the north there. That is fissure No. 10. That is ore and clay there. We come around in a flat incline to station 475 plus about forty feet. We have a fissure at that point that has a dip to the northwest of sixty-five degrees. That carries two feet of ore and clay. We then go down the winze and come around through the drift.

Mr. Ellis: It is marked two inches on the map.

Witness continuing: Going back to fissure No. 6 that is marked six inches. Going down the incline and following the drift
185 around to fissure No. 2 is a well defined fissure about ten inches, which is referred to by Mr. Wiley, going up in the roof in the bed of lime, carrying ore from fissure No. 10 observable around to fissure No. 2 and fissure No. 1, which is one and the same—it checks up very well. These fissures go through the roof. There is a stope at No. 10 which goes up through the roof. Stope No. 1 had all the signs in going up through Winze No. 2 of striking the same fissure at point No. 7. • No. 7 fissure is merely a cross cut. There are no workings showing it up and down. No. 6 in the southwest extension runs into a very large ore body, and of course is obliterated by the extensive stope as well as by the putting in of bulk heads and cribbing [is] up with cross timbers to hold the ground. The ground is quite heavy but an ore body there must have been well—it was all pretty well stoped out at the time I got in to make the examination on that in May or June, I think, 1908, the stope had been pretty well exhausted, but you could see and get some samples of ore which I found up twenty feet high as the height of the stope. That would be the southwest, from the point on that marked "Snuff Drift." The highest part of the stope is 90 feet; southwest of station 350, and west of the end line on the Conkling claim as claimed by the defendant.

From my observation of the crescent fissure wherever I have had an opportunity to see and study it and from its contents and from the occurrences of the ore in the neighborhood of the Crescent fissure and observable in particular workings in and through the fissure,

my conclusions are that it is a fault fissure. In brief, my [reason-] for thinking so, are as follows: I don't think that the fissure has done any of the mineralizing whatever, but that the ore bodies that we find there in the Elephant stope in these beds to be entirely made up from the fissure system with the solutions as they come through and have replaced the lime. It has been a very slow process, and taken a very great period of time to do so, particle by particle, and that is the course of it with the waters containing the mineral solutions that these ore bodies have been from. The fissure itself is filled up with material that has nothing cemented or banded about it. It lacks the characteristics of a vein and is composed of broken matter filled up with clay and mud so that you cannot carry your work through on it, because it would slide down and because of caves. And even if it was banded there would be great danger from hanging ground and you would have to mine it by picks and dynamite, and it comes away too fast. It is loose material, everything indicating a fault. The surface on top indicating a fault. There is a bed of quartzite lying to the southeast which can be seen in [shaft-] 186 [No.] 1 and 2, and there are millions of tons lying back on the ridge back of the line of the fault, blocks of quartzite that will weigh ten tons, and none to the northwest, so that is a natural demonstration that there is a fault there; and it is not of a few inches. In my opinion it is one of the master faults of that great district, and next in importance to the great north and south which cut off the Ontario mine on its extent.

Again, showing that I am right in saying that it is a fault, the Silver King Mine itself has a quartzite foot wall and the principal resources of that mine are in the beds, and lie at or near the contact of the quartzite and lime. It has a dip all the way possibly to an average of 18 to 20 degrees. Fissures in that mine extend throughout the limestone down into the quartzite and are sought for and followed deep down as developed. In the quartzite there are raises put up through it and they are invariably leading to large ore bodies lying upon the point of contact. I have seen that in a number of places in the mine as is shown by the map of the defendant and especially this lithograph map, where there are marked various fissures, and also on the line of these fissures where the great mineralization has taken place. We are in the same mountain; it is a part of the same mountain and the same ridge. It is a part of the same mountain taking slices off of it, so that there is no difference in its geology except that it has been cut by two or three porphyry dikes, and this great fault dike dipping to the southeast that has also faulted and quartzite underlying the Silver King, so that had gone down on the southeast fault, we don't know how far, but it must have been extensive, otherwise the Daly-Judge and the Daly-West mine lying immediately thereto in a southeast direction across the dip could not have the same quartzite if such a fault as that had occurred and the counter part of it down below. That fault is recognized. I have recognized it for long distance to the east and on its [northwest] extent going on for four or five thousand feet, and is still going as far as I have been able to see.

Cross-examination.

By Mr. Dickson:

I have never studied geology in any of the schools; what I have learned is principally from observation and reading. I read Dana ten or fifteen years ago. I cannot call to mind what other works I read; do not remember today anything particular that I read in Dana or in the works of any other geologist about fault fissures or anything in connection with fault fissures.

187 For the past thirty years I have studied carefully the geological formation and conditions in the Park City mining district, and have been familiar with the fault system that I have spoken of ever since I have had an opportunity to study those mines, which is about thirty years. So that for thirty years past I have been familiar with the formation of the limestone and the quartz and shales as they lie on above the other, and for thirty years I have been familiar with the fissure system in that district and its relation to the ore deposition, but I have added to my information in respect to those matters every day so that my knowledge has been increased right along. I become acquainted with mines in which I was interested and was directing the work thirty years ago. I was manager of the mine until the litigation lasting two years was settled. The next mine I was connected with was, I think, the Alliance Mining Company and I was connected with it until it was sold to the Silver King. I was the heaviest individual stockholder in it at that time, and directed the work in it for six or seven years. It must have been ten or twelve years ago since I was connected with it. I was not as familiar then with those geological conditions that we have been speaking of as I am today, but I have had a knowledge of such conditions. The mine in which I was the principal stockholder, proved futile utterly.

The next corporation when I was the principal or one of the large stockholders, was the Wabash Mining Company, which I operated eight years, operations ceasing about three years ago. I was quite familiar with this mine and the country about there, and with the geological conditions there, and during those eight years, so far as profitable results are concerned, the operations proved futile and my predictions were not fulfilled. The next mine I had charge of or was largely interested in in the Park City district was the Conkling Mining Company. I have done no work upon that at all, having been too busy defending my rights there. Have done no work upon it either in the Arthur or the Conkling at any time, except to go in and examine the ore body found by the Silver King Company, after it was developed; after it had been appropriated by your clients.

I was familiar with the geological conditions in that section of the country for a number of years before that, where the Arthur and Conkling mining claims are.

Q. And you thought the prospects better in the Alliance where you worked eight years and in the Wabash where you worked for eight years to discover hidden wealth than in the Arthur and Conkling?

A. I was headed all right in the Alliance.

I was headed all right in running the extension of the Alliance tunnel to the southwest, but quit it about twelve years ago.

188 The property was practically given away to the Silver King.

Q. After you were stopped when headed for the Arthur claim twelve years ago, did you ever begin to head for it again until after this ore body was discovered in what is called the Elephant stop?

A. You mean with physical work underground?

Q. Yes; or directing work there. I don't mean with a pick and shovel.

A. It was beyond my control.

Q. You were one of the principal owners of the Arthur and Conkling for a great many years before the Conkling Mining Company was formed or the property conveyed to it?

A. Yes.

As shown on Exhibit III, about 180 feet from the mouth of the Hanauer tunnel, was where I started off a cross, nearly 200 feet westerly of the station somewhere about the mouth of the tunnel, and found a fissure. That branch of the Hanauer tunnel on in the course that it had from its mouth to that cross cut was not done by me but before my work there.

Under my direction the Hanauer tunnel was driven on the Crescent fissure. According to my recollection, practically the distance shown upon the map, but I would not be positive about it all, the distance on the fissure being somewhere between a thousand and fifteen hundred feet. According to this map the Hanauer tunnel was run practically in a straight line about sixteen hundred feet. The work was done by the Old Sampson Mining Company. I was not connected with that in any way, only called in as a consulting engineer about the time that tunnel had reached its present face. I know from having been called in as a consulting engineer that the Crescent Company in driving that long tunnel was in search of the Crescent fissure. When I took up the work to drive the cross cut southerly and southwesterly at a distance of about one hundred and eighty feet from the mouth of the tunnel, I was in search of the Crescent fissure. When I went back to the main tunnel I did not start off another branch on the fissure, but to catch the fissure, and I did catch the Crescent fissure. I started in that to catch the Crescent fissure, and then drove it from there something over a thousand feet following the Crescent fissure. I was engaged in the work of finding and thereafter driving work along the Crescent six or seven months, the work being carried on quite persistently. We went about at the rate of a hundred and fifty feet a month,—a thousand feet would be six or seven months. I made the raises that I have enumerated from that Hanauer, that

portion of the Hanauer tunnel that I was driving upon the fissure, and drove them up on the fissure. I did not sink any winzes from the Hanauer tunnel. The raises that were put up in the 189 fissure were driven up in the ore to find any ore in the fissure.

The work of driving the level along the Crescent fissure for that distance was done in the hope and in the expectancy of finding ore in the fissure, but it was a fruitless hope. I can't say that I ever believed that the Crescent fissure was a vein. The Alliance Mining Company put a hundred thousand dollars in the claim. That part of the Hanauer tunnel that was driven under my direction, cost, I should say, twelve dollars a foot.

I commenced this work in the Hanauer tunnel in search of the Crescent fissure in 1887. I think the contract for this Alliance tunnel was given for fifty feet, if I recollect, in 1891, so we had ceased the upper workings by that time, and confined our work to the tunnels, and then went down with the Alliance tunnel. We were hunting in part for the Crescent fissure. In direct examination I testified that the Alliance tunnel was driven for a distance of two thousand feet under my supervision, in close touch all the way with the Crescent fissure, and that at intervals I ran cross cuts off from the Alliance tunnel to get the Crescent fissure. That was being done in search of the Crescent fissure in that line of work.

Q. So that all the work you had done in the Hanauer tunnel after you found the fissure driving that tunnel along the fissure did not convince you, no matter what you had discovered, or failed to discover there, that that was not still a vein, the Crescent fissure, but believing it still to be a vein you went down and prosecuted this great work on the Alliance tunnel in search for the same fissure, claiming it to be a vein, didn't you?

A. That is untrue.

Only in part did I go down the Alliance tunnel and start work there or contract for work to be done in search for the Crescent fissure.

Q. Did you drive this two thousand feet where you kept in close touch with the Crescent fissure for the purpose of working on that fissure, getting to it?

[—.] In doing this two thousand feet we were quite a distance from the Crescent fissure when we changed our tangent.

Q. I am speaking of this two thousand feet before you changed your tangent?

A. You mean the 2,000 feet?

Q. I mean the two thousand feet you just spoke of in direct examination, where you said you had kept in close touch throughout that work for the Crescent fissure, and at intervals drove off cross cuts to get to the Crescent fissure.

—, I did all that work running the two thousand feet after I ceased working the Hanauer tunnel. Part of our work, but not the whole of it, was in search of the Crescent fissure and to develop it. In running off these cross-cuts along that distance of two thousand feet,

one branch of our work was in reaching for the Crescent fissure. Each of the cross cuts that was run from this two thousand feet which cut the fissure, was extended until it cut what I believed was the Crescent fissure. We stopped the cross-cut and didn't go beyond the Crescent fissure, but we carried out other work. The object in running that two thousand feet of tunnel close to the Crescent fissure and close to the Crescent vein, and in running out cross cuts as we did until we caught a vein, done while in search of the Crescent fissure, was to see if this fault fissure, that is, the Crescent fissure, might contain ore. The work was all done to develop the Crescent fissure, and in the hope that we might find ore in it, but we failed to find it, after we had done a vast amount of work on the Hanauer tunnel on that fissure. I was determined to exhaust the possibility to see if it was a vein containing ore bodies or not, but it was a geological delusion that I had fallen into. I am quite open to them. The geological delusion that I fell into is a situation of there being a perfect, rather ideal, cutting of the formation, the fissure in those days. The Ontario vein was a great property and everybody was looking for a fissure that would duplicate the Ontario, and this looked to be an ideal one. When the work was taken up I talked to them about paying for the running on the dip to find ore as a commercial element. In running our deep tunnels it was for other objects we had in view as well as the demonstrating of what was in these fault fissures; we spent also three hundred and forty-seven thousand dollars.

One of the purposes in running the Hanauer tunnel was of course to see if there was anything in this fissure. The other purpose was to corral, so to speak, the entire northwest and southwest country under that tunnel. My plan miscarried. While I was engaged in driving the Alliance tunnel, the only property which would be, or was in fact, cut by the Alliance tunnel in which I had an interest, through which the Crescent fissure or fault fissure ran, was the Arthur and Conkling. I had no property other than these two claims that this fissure would cut through. All it cost me was done while I had the property or had an interest in the property that was cut by the Crescent fissure. I drove the Alliance tunnel into the Arthur claim to about station 321, on Exhibit 5. I did not do that portion of the Alliance tunnel shown upon Exhibit 5 that is marked "Crescent cross cut." Our work in the Alliance tunnel terminated a hundred feet or such a matter east of the end line. This claim is 954 feet long and that is the west end line of it. We did not extend the Alliance tunnel on into the Conkling; we had reasons for that. I did not think we were on the Crescent fissure up there while we were running that, and I did not think so when the work was done.

While driving the Hanauer tunnel we very seldom found 191 bunches of ore in the fissure. We found them in sufficient quantity to encourage us to go on as far as we did drive that tunnel; that is, we continued the work. I thought it advisable to cut the lime beds, that is why I raised in the fissure. Where I started the first upraise it was not started because of indications in the tunnel itself in that vicinity; there was nothing there of any

special significance, but merely to put the raise up. It looked there just about as it did any place else.

Since the work ceased, I have been through the Hanauer tunnel from the Aetna shaft to the head of the Columbia raise a number of times. I have been there recently and have examined it so far as it is possible to do so, and from my own examination of that portion of the 400 level it is no better in appearance than was the Crescent fissure driven as I drove the Hanauer tunnel on it; I can't see but very little change in it except upon the southwest end. For a thousand feet from the Aetna shaft as I examined that 400 Level, virtually from the Aetna shaft, it looked no better so far as the vein indications were concerned than it did at a thousand or fifteen hundred of the Hanauer tunnel that I had driven on the fissure, except this, there is more clay visible and soft broken up matter. So far as ore indications are concerned it was no better than was the fifteen hundred feet or such a matter that I drove the Hanauer tunnel through along the fissure, except at the point about a hundred feet northwest. About a hundred feet northwest of station 419 there was a mineral showing on the northwest side of that tunnel in the way of iron pyrites. I would say from the Aetna shaft station 419, in the 400 level, so far as ore occurrences are concerned from a commercial standpoint, that the showing is no better than it was in the thousand or fifteen hundred feet, though in fact on the same fissure; I saw but very little change in it, and I would say it is no better particularly from a commercial point, because there is not a foot of it stoped. I have worked in many mines, fissure veins. It is not very usual to go along and find very considerable distances, hundreds of feet, a good many hundreds of feet, where the vein, speaking from a commercial standpoint, would be valueless, but the continuity would exist, although it may be a barren vein.

I am acquainted to some extent with the great Comstock vein, and there is a large section of the Comstock vein on the Bullion mining property located —, that has been worked vigorously for more than thirty years and never a pound of ore taken out of it. I think the workings of the Bullion Mining Company in that large section of the vein was right in the heart of the vein, between the walls of the fissure, and from a commercial standpoint it was utterly valueless as any part of this Crescent fissure that I have ever driven upon or seen. However, there is a great deal of difference between a vein and a fault. I believe this to be for a long time a vein. The ore that I found in small bunches as we were driving the Hanauer tunnel in this fissure was surrounded by clay, and had the appearance of drag ore. There were little streaks but showing it was not ground up, and you would find some places that would weigh several pounds and some of it fine. It must come from the beds above.

On the plan map, Exhibit A, the porphyry marked on the lithographic map, Exhibit 16, marked "P. D.," right at this open cut, about midway between the side lines of the Boss claims, the little line seen there I think is the old wagon road. On this same exhibit where it is marked "tunnel," is the Buckey tunnel. Exhibit A,

photograph, was taken looking west in the direction I sighted. On exhibit 15 I pointed to a place that I said was what was supposed to be the foot wall of the [quartzite] of the Silver King and is marked "F." From the northwesterly corner of the Boss up to where we have Silver King quartzite, it is a general northeast direction about three thousand feet. The posts of the Walker and Walker Extension are shown upon the plan map, that is, my map.

The porphyry which is at the intersection of the north side line of the Pinyon and Pinyon Extension with the Boss—the line of the Boss—is shown on photograph 13. It is a point here that the road crossed. It is the same one that shows in the photograph this cut. Instead of being at the intersection of the south side line of the Pinyon and Pinyon Extension with the north side line of the Boss, it is at the intersection of the south line of the Pinyon and Pinyon Extension where a line drawn at right angles near the side line of the other would fall about midway between the side lines of the Boss, it is practically in the center of the Boss.

I found the Crescent fissure in the Buckeye at about this point as the photograph shows. The Buckeye tunnel is ninety-seven feet above the Democrat tunnel. The whole Buckeye is not shown there about a hundred and fifty feet. As shown on that map it is simply an estimation; it was not surveyed. It is quite prominently traceable, so that I was able to identify it as the Crescent fissure. It is practicably the whole width of the drift; fissure material for its length, and I followed the fissure there for about a hundred and fifty feet. It is dipping to the southeast at an angle of about 70 degrees. The average dip of the fissure from the tunnel down to

where we have it in the 400 level as shown on the section 193 which has been made, is 67 degrees. I have taken the elevation where we have the fissure in the Buckeye tunnel and where we have it in the 400 level, and given the horizontal distance, and the dip. It was taken on the east side, at a point in the Buckeye tunnel and projected on this map clean down to the Hanauer tunnel. I can take the difference in elevation on that map and give the dip. I have surveyors in my employ, and I have done a great deal of preliminary work myself. I had Mr. Anderson in my employ, and the young gentlemen who testified and they have done surveying and platting for me. I made surveys for these independent platting instead of keeping my mind on mining engineering (although I am a mining engineer and make surveys) and plats from the result, instead of having them make the surveys, because my finances compelled me to do my own work. That is why I did not have Mr. Anderson make the surveys of what I surveyed.

I gave quite a full description of the ore occurrences in the Silver King mine. That was on a vein entirely distinct from that in which the ore bodies in controversy here are found. You start in ore on the Silver King near the 700 level and follow on ore practically on the plane of contact and making from the plane of contact out into the beds in a continuous channel of merchantable ore for over a mile without a break, from its apex down but across the dip. I ran the first survey from which I platted Exhibit 18 in 1908, but I have

taken the platting now from Mr. Anderson's survey except the part here which I did myself. I meant the construction of the map as my own work. The surveying I did was at station 475-a and down this line following the drift. That would be from station or near station 475-a to this northerly corner where the word "ore" is and then where it went below, and thence to the station where the figure "2" is found, at the bend, thence continuing to its southerly face. That is all the surveying I did for this map. I made no other surveys for use in this case except that which I have indicated. I called Mr. Boehmer's attention to my fissures numbered 9, No. 8, No. 7, No. 5 and No. 6 and the others that I have testified to. Fissure No. 11 has a dip southeast 50 degrees and is about two inches wide and is filled with vein matter. No. 9 is a fissure that the course of is north 15 degrees east, 6 inches in clay. It dips 55 degrees. No. 8 dips north 40 degrees east and is ten inches wide and clayey. The dimensions are marked on the map, also the direction of the dip. I called Mr. Boehmer's attention to these fissures during his 194 last examination during the last month. I certainly think these fissures had to do with the mineralization of the beds where the mineralization occurred. Fissures 8, 9 and 11 do. I discussed it with Mr. Boehmer, and expressed to him that I thought these fissures did have something to do with the deposition of the ore. The fissure *is* in my numbers that I spoke about going up above the Elephant stope, would be No. 1, No. 2 and No. 7. Those three are all in one fissure in my judgment, and they align up very well. I was up the Columbia raise as the work of driving it upward was going on only once and that was in company with Mr. Boehmer. When I first went up to it, it was up I think about two hundred feet. I was not there after that while the work was going on. The Columbia raise is in porphyry at the bottom and as it runs up the K. K. drift it is in porphyry, and at various points through the raise the porphyry does not show. It is quite heavy ground. It swells so and the territory through which that raise was brought from the bottom up to the 400 level is so heavy, due to the presence of the porphyry there and the water, to make it very difficult work to raise on. I found in the fissure in the Columbia raise in a number of places from its bottom up to the 400 level loose broken material apart from the slide that would come from this porphyry. I found it coming down the Columbia raise at Drift F. The Columbia raise there is in the hanging of the fissure. Where the Columbia raise is in the vein and porphyry out on the hanging wall side, I saw in one place in particular in the raise this loose material. I think it was the engine drift, where the fissure showed there possibly for fifteen or twenty feet that it had run down, run itself out. It was ore. There is ore in that vicinity. It is underneath the fissure and the fissure is over it. I do not think the ore is standing in the fissure. I made no notes of the survey that I made and platted. There is porphyry in the top of the bed rock in the Constitution West drift and East drift. There is a fissure and porphyry in the Constitution east and west drift, and [porphyry] at the bottom of the Columbia raise in the same fissure. I have seen it at other places at intervals

in the fissure in connection with the fissure between those points. I don't think the porphyry has any relation whatever to the Crescent fissure. I encountered the Crescent fissure at Station 357. I continued in the Crescent fissure and in the Crescent workings clear through to the southerly face at the end. It is four or five feet wide. It is run on the strike of the fissure. The Crescent fissure is found running out here in the lime beds. There is a showing of ore near Station 350, but it does not come back to the fissure in a southeast direction. I never requested the removal of any lagging
 195 along that portion of the Crescent fissure to see whether or not the ore in the beds makes back and connects with and commingles with the ore standing in the fissure. The data which I employed to plat on Exhibit 17 the red coloring under the head of Crescent ore body I took from the point at the intersection of the Aetna tunnel with the porphyry dike where this vein of ore was cut off by the porphyry and run the line to where it would come to the surface in the Buckey, Lot No. 4; I simply drew a straight line between the two; it is simply illustrative. I have seen the defendant's longitudinal section that has been referred to by many witnesses, Exhibit CC. If I knew the fact to be that all the stopes shown on this Exhibit CC easterly to the plane B either in the fissure or at places in the bed and where in the beds the bedded ore made out and connected with ore standing in the fissure, I would still be of the opinion that the Crescent fissure was not a vein; it would not change my opinion.

Redirect examination.

By Mr. Critchlow:

I found in going up to the Constitution drift from the bottom loose material in Columbia raise. There was also quite a large volume of water, almost a torrent running down there wherever you can get an opportunity to see the foot-wall of the raise. It is not possible for anything else to remain in that torrent of water while that is running down there.

The design and intention of the directors and the stockholders in running the Alliance tunnel was to get the Crescent mine, in fact, to get the entire region under that tunnel which would cover a territory of maybe seven hundred and fifty or a thousand acres, and this tunnel independent of what would be found or seen in the Crescent fissures would be extended by laterals and develop these mines which we intended to take in from time to time, but the plans were not carried out, we all consider it was very valuable territory and the object was to consolidate it and bring it in by a purchase or otherwise.

Cross-examination.

By Mr. Dickson:

I would place the apex of the Crescent fissure as it traverses the Brave Columbia, Constitution, Cumberland and Monroe Doctrine

claims off this way to the northwest of the Brave Columbia line, that is measured along to the bed rock. In the running of the Constitution East drift and the west drift near the top of bed rock, it was not necessary that pile lagging should be driven ahead
196 to hold the debris from [coning] down. At one point which I have described you encounter in the roof and on the sides of the drifts, or near the top, the roots and vegetation coming down.

WILLIAM A. WILSON, a witness produced by the complainant, heretofore duly sworn, testified further:

Direct examination.

By Mr. Critchlow:

I am a mining engineer and graduated from the school of Mines of the Columbia College of New York in 1882, and have been practicing my profession ever since in this city and elsewhere. I have conducted examinations in about all the states of the west and territories and in Alaska and down in Old Mexico. I was at one time at Park City continuously for a number of years, from 1882 until 1892. First I ran a sampling mill for two years which was obtaining and sampling ores from the Crescent mine and other mines in the district. Next I was assayer for the Ontario Mining Company for about two years. For the balance of the period, four or five years, I was running the Marsac Mill and buying and treating the ores of the district.

About ten years ago I entered on the practice of my profession as a mining engineer. During that period, while I was at Park City, I visited various mines. The first examination I think was the Crescent, about 1883. I was in the mine sufficiently to form a decided impression as to the ore bodies there and the manner of their occurrence. I saw bedded ore deposits making in the formation of the northwest. I also visited the Sampson mine, referred to here, and saw there ore bodies of the same character and sampled ore from both of those mines, a large number of samples. I have visited in the Park City district the Crescent, the Sampson, the Silver King, the Mayflower, the Woodside, Ontario, American Flag, Daly-West, Daly-Judge, and a great many properties down in McHenry gulch, among which were the Walker and the Webster. Those visits were mostly educational in my line of work, in looking at and becoming acquainted with the country. Some of them were professional. I was employed by the plaintiff in this case to make an examination of the property in controversy, and my examination, as to this special case, was in October, 1909. At that time I spent most of the time on the surface. I went to the Conkling corners and spent two days there especially going over the Conkling corners. I went there at the instance of Judge Dey. In addition to that examination the work was traveling over the surface ground represented on
197 the Exhibit as the Boss, the Zephyr, Buckey, Constitution, Brave Columbia, Cumberland, and Monroe Doctrine, and in

that vicinity, for the purpose principally of studying this case. I was in the Alliance tunnel and the Hanauer. At that time it was understood the connections were not made to some of these workings, like those of the Constitution and the connection to it had not yet been run. Shaft No. 1 was down there, but I was not in it at that time in 1909. It was called the Porphyry shaft. None of shafts 2, 3, and 4 was down then. I made an examination of the surface at that time.

Q. Now, Mr. Wilson, I would be glad if you would proceed and state your conclusions, your observations and conclusions with reference to the relation existing between the Crescent fissure as developed in any workings which you have visited and the ore bodies which occur, either physical connection or disconnection between that and the lime and in the body of the mountain, and as you go along explain so far as it is necessary to show the facts as you observed them from point to point?

A. Well, in studying this fissure I began on the surface outlined by the Constitution west drift and Constitution tunnel leading to them. I examined this surface ground and within and beyond the southwesterly portion on the surface, a red coarse grained silicious lime or quartz. Coming to the northeast the character of the ground changes and you do not have any perfect exposure; there is soil and then there is some debris underneath that, and underneath that again we have the rock in place but broken and crushed so that it is difficult to go through it. With tunnels or anything driven into it they have to put lagging ahead to protect them and hold them up. So that really the ground on the surface as we see it there is wash, and at some of the places on the surface is from two and a half feet to maybe five, ten or fifteen feet in places where a gully has washed down the hill. This hill is a very plane surface with a dip to the northwest of about fifteen degrees, and it gradually rises to the northeast on the line of the Constitution tunnel. So that, in this Constitution tunnel where we have the fissure exposed, why, its point or outcrop on the surface would be to the northwest from where it is seen in this line of working; and in the Constitution tunnel found the fissure practically traversing it from end to end. From that fissure the shafts 1, 2, 3 and 4 extend up to the surface. I examined No. 1 of those shafts and came to the same conclusion in regard to the depth of the debris. In the Constitution tunnel where it intersects the Crescent fissure, as we called it, is a working extending down below. This is what you would call the Apex first drift. This is on the fissure
198 near the limestone and from that upwards in the Constitution tunnel you can see it going down to the Apex tunnel. On your way down you can go and examine workings from left and right, all in this fissure. It is probably a foot in extent and continues down into the Apex tunnel. In the Apex tunnel you can travel on that fissure to its intersection with the Apex tunnel between where you come to the first Apex drift—between that point and the Apex tunnel there is a winze sunk on this fissure. This

winze goes down for seventeen feet on the regular dip of this fissure. From that point it changes its dip to about 45 degrees, but the change is owing to a mistake of those following the fissure and leaving it at that point and going off on a seam which can be seen at the Constitution tunnel at different points where they have got into the seam. The seam is at different point. So that this seam seen in the Constitution tunnel on the natural dip probably straightens up as it goes on its dip. I don't think there is any other connection.

Q. What appeared between where you saw it and the Constitution?

A. As it goes on the dip of that fissure, the Crescent fissure in the Constitution tunnel, the raise which come from the Elephant stope is found and I went down that raise, starting from the Constitution East drift and I proceeded down that raise through the various workings until I got to the Hanauer tunnel, or Level No. 4.

On my way down the fissure in several places, or in places, porphyry was struck. In one place 110 feet above the Mahoney raise ore was found in the 150 foot drift from the foot of the Mahoney raise and the Reimer incline, some ore is seen in there. Down the Reimer incline to the Hanauer tunnel by crawling across the timbers you can see porphyry in several places, and when you get to the Hanauer tunnel the ore evidence there is sufficient to convince you that you are on the same fissure you started from in the Constitution tunnel.

Proceeding southwesterly along the Hanauer tunnel or Level No. 4, we came to the head of the workings to explore this Crescent fissure, and from the Hanauer tunnel down to the Elephant stope I have been down twice and examined the various workings therefrom, and my conclusion there is that the same fissure that is found in the Hanauer tunnel is also seen at the Elephant stope at the foot of the incline or of the Columbia raise. I also examined the workings of the K. K. incline which starts to the northeasterly of the Columbia raise and goes down at an angle of 45 degrees in the foot wall country underneath the Crescent fissure. At a point about 80 feet down that raise I found a bedded vein ten or twelve feet thick, conforming in strike and dip with the country

199 rock. That bedded vein the first time I saw it was only developed to the northwest. It proceeded in some irregular working in the bed down on the northwest, and the extreme working was a little drift pushed down to explore the ore as it came up again. The ore kept going northwest and kept dropping down in the joints of the rocks, so that at the face it was still in ore. That ore, however, may have taken another shoot and that may not have been the proper point to follow it, and it might have been stronger in following it in another direction on the bed.

On my last trip on February 3rd, I found that this same body of ore had been developed to the southeast, had reached the Crescent fissure, and they were proceeding upon the ore until it reached the fissure, but just before reaching the fissure it tilted down and

at the junction with the fissure it had bent right down on the general direction of the fissure at an angle of about 50 degrees,—that is, the bending. The fissure is plainly seen here with porphyry in it and I think the fissure has been cut through and reached the Basset edges of the lime rock on the southeast.

From there down the K. K. incline No. 1 connects with the Columbia raise, and one can go in either direction around to the Columbia raise; right where this Columbia raise intersects Level No. 1 of the K. K. incline, ore is found and also where the K. K. incline connects with that level. Ore is found there tilted to a considerable angle, but off to the northwest the ore is seen going down on the dip. It is just where a portion of it is broken down and conforms more or less to the fissure. This ore is traceable in the level in the northwest and has the same characteristics with the ore as it approached the fissure vein as it was tilted. Going down to Level No. 2 with the K. K. incline this also connects around by drifts with the Columbia raise. At level No. 2 I also found ore with the same characteristics that, it is bent down towards the dip of the Crescent fissure.

From Level No. 2 I went down the Columbia raise to drift F where in the raise at level No. 2 of the K. K. they have a cross cut over into the hanging, and dropping down in the hanging country.

I have finished the description of the No. 2 Level of the K. K. incline and have followed around to its connection with the Columbia raise. A cross cut from the foot of the Columbia raise would strike the No. 2 level and runs to the southeast, and from the Columbia raise it was continued. It is there in the hanging wall of the Crescent fissure. Descending down the Columbia raise

I come to Drift F, and at that point there was a cross cut
200 still in the hanging country, running to the south parallel to the Crescent fissure, and to reach the fissure the drift had to be run to the northwest. In that drift the ores encountered show in the bedding planes dipping northwestward.

Again returning to the Columbia raise, I descend to Drift E, where the same veins exist. The Columbia raise is in the hanging, and I go in the drift to the southwest and then went west and the ore is again encountered. There it shows a considerable deflection from its true dip to the northwest bending down towards the Crescent fissure.

From Drift E I again descend the Columbia raise to the Engine Drift D. This shows workings, and at that point where the Columbia raise has about penetrated the vein one of the veins of the bedded series,—and in that drift, why, ore is again found, but in the bedding and showing some drag along the Crescent fissure.

The Drift C is further down the Columbia raise and the workings consist of a drift running along the bedded vein in the ore with the fissure showing on the left-hand side.

Drift B, I have never seen in; I could not find it, and the drift below B, the Custer drift is a small drift also practically in ore in a raise extending to the southwest, and the ore showing on the

right hand side in the debris. From that point down the raise shows porphyry at different points, and down at the level where the Columbia raise reaches the level in the McKay cross cut, the porphyry is there seen and a little drift, not shown upon this map, of about forty feet to the southwest of the Columbia raise has penetrated the porphyry and shows about five feet thick with the lime dipping northwesterly from the southeasterly side.

That is the foot of the Columbia raise, there is a little drift about forty feet to the southwest in the hanging country. It cuts through porphyry which is five feet thick there, and reaches the porphyry on the hanging side.

At the foot of the Columbia raise the country had been excavated, mined out, so you don't see the vein until you proceed along to the southwest. There it plainly shows upon the right hand side of the drift, shows bedded ore and portions of the Elephant stope.

Another point that I have seen the fissure at this level is in the workings extending on the same level of the Alliance tunnel and off to the westerly through the Teddy drift and into the Kermit drift therefrom. This Teddy drift runs southerly and meets again

the Crescent fissure at the point where the Kermit drift is shown on this Exhibit A. I was in this drift about a hundred and twenty-five feet. At that point it is caved, but it has the characteristics of the Crescent fissure and I have no doubt that it is, but at that point I found no ore, but it shows the character of the fissure, and at the point where it is away from intersection of any ore body.

Returning to the Constitution tunnel and the drifts running east and west therefrom and where this fissure practically appears at the surface, I find the last point that I saw it to the northeast in shaft No. 1 down about twenty-eight feet. There is a fissure shown lying upon the underside of the porphyry and with a dip of about 54 degrees extending to the surface. This shaft is just outside of the Boss line and from that point on the Boss line the surface is rising gradually to the summit of the ridge; crossing the ridge where it goes to the United States mineral monument No. 4 and along the Pinyon and Pinyon Extension line, and so there I saw from the general strike of the Crescent fissure, it must parallel that line, but lies to the northerly of it, and at some point towards the easterly end line where the country takes a steep dip towards the Boss shaft where the fissure has been found. It must cross the line there, the side line of the Boss. The northerly side line there enters the Boss claim, and I think that is the first point it does. It is probably at the end of the Pinyon and Pinyon Extension claim where the Apex of the Crescent fissure will come to the surface.

By the Court:

Q. Which end? You mean the easterly end?

A. The easterly end of the fissure. I was trying to give the point, the probable point of the outcrop of the Crescent fissure on the surface from the westerly end line of the Monroe Doctrine to the Boss

shaft where the testimony has shown the Crescent fissure, and for that reason I had the workings of the Constitution West drift and Constitution East drift and with the fissure where seen in any of these workings on its upward course still rising to the northwest shaft which to the northerly of the Boss side line down to a depth of twenty eight feet on and on its rise up to the surface from the Boss side line. The hill from this point rises to the northeast, and for that reason this fissure on its natural course as shown by these various levels, stood outside of the Boss north line, but with a rapid ascent on the hill. I think it would cross the end line of the Boss. You would enter there to reach the Boss shaft where it has been located. I think that is a point somewhere near the Buckey tunnel in the Pinyon and Pinyon Extension.

That is on the map Exhibit A, which is a part of the work of the Pinyon and Pinyon Extension. It may be a little to the
 202 westerly of that as the line of the ridge where the mineral monument No. 4 goes in this direction, but there is a raise from the Boss shaft to the ridge of about 350 feet. The outcrop of the fissure as shown by the defendant's Exhibit A appears to cover the occurrence of porphyry seen on Exhibit A as 1. That has a large showing of porphyry at that point without development to any extent. It measures some twenty-one feet, as I measured it in extent, and shows the walls standing vertically with a course of about north 10 degrees east magnetic. It would be about north twenty-seven degrees. I can't connect it in any way with the porphyry that I have seen in the Constitution East and West drift; and extending to the northwest of this porphyry at point K-15—

By the Court:

Q. The contour of the country in your judgment would show the apex to the north?

A. Yes; with the continuation of the dip to the southeast. If it was flat it would continue its regular course, and it would go diagonal from that point.

This fissure is found accompanied by more or less attrition matter—that is, the fissure has caused the adjacent rock to be ground up and making a clay in places where the fissure has cut through the beds, and it has crowded some of the beds, some of the ore of the bedded veins in it; so that you have a more or less tabular mass of attrition matter with ore in it in places, and that is the Crescent vein as I look at it.

From the examination I made I found this Crescent fissure to be a fault of great extent and all the workings that I have been through have been practically on the great fault with the throw of a normal fault. The hanging wall has gone down to an extent that I do not know, but it is probably over a thousand feet; and this effect of this fault has been to cut the dike which appears to conform more or less to the Crescent fissure, so that we only have patches here and there now. Where the raising of the dike left portions here

and there so that when we examine the Columbia raise and go up to the surface we find we have porphyry in the Mahoney raise, in the Apex workings, in the Reimer raise, at the Hanauer tunnel, at No. 2 level of the K. K. and down in the foot of the Columbia raise, and there are places in there that evidently the porphyry has been completely rubbed off and the hard rock of each side of the fault fissure has come very close together, leaving a fault. This is plainly seen in the workings upon the Crescent fissure in the Apex tunnel.

By the Court:

Mr. Wilson, how do you account for this occurrence if that hanging country has gone down a considerable distance,—where your
203 fissure is on the foot of the porphyry, you must expect to find the porphyry there entirely carried down, must you not?

A. Where the fissure is upon the foot of the porphyry?

By the Court: Yes.

A. Yes, sir.

By the Court:

Q. And as shown by Mr. Bachmer's section at some places where the fissure is on the foot of the porphyry, you still find hanging porphyry, and where the fissure is on the hanging part of the porphyry you still find in some places no porphyry at the foot. Now, why is it you have these several occurrences of porphyry that do not seem to be carried away, and at other places its disappearance on the fault?

A. That I will account for by the fissure taking the line of least resistance. In places where the porphyry is firmly attached to one wall or the other it would stay there, and the fissure would be on either the hanging or the foot wall side of it.

Q. Do I understand that the fissure may go from the hanging to the foot of the porphyry?

A. Yes, sir.

Q. But the disappearance of the porphyry does not seem to depend upon the fissure, for instance, where the fissure goes to the hanging you still in places find the foot wall, and where it goes to the foot wall in places you find the hanging of the porphyry. How does that accord with your theory of a big drop that carried the porphyry away?

A. That I will explain by saying that a mass of porphyry from some higher point on the fault was carried down to correspond with the mass of porphyry on the foot that you have there.

By the Court:

Q. Exactly, but if that be a continuous mass why do you have the disappearance of the porphyry intermediates between the two appearances of porphyry?

A. Because the porphyry has accumulated at these points. Now we find that porphyry from a few feet wide to twenty feet wide in places. Where we cross the Hanauer tunnel at the head of the Columbia raise this porphyry is twenty feet, and they start down on the hanging side of the porphyry in that raise. The intermediate porphyry in the fissure may have been carried down the great fissure a thousand feet, so that the porphyry we have here would be crushed down here and double up.

In this slope down the K. K. incline that I told you about, where the ore is upon the rise of the porphyry, where the Crescent
204 fissure has cut and let down, and some of the other porphyry has overlaid the other, so as to make a greater fissure so that instead of being altered to start out with, this will be two or three feet in thickness.

The other evidence we have in regard to this being a great fault is on the surface. I know the country there very well, and over in the Fairview claim is found what is called the Ontario porphyry. There it is found in its true position overlying the lime, and within these immense lime beds we find that ore, but that does not show clearly on this plat.

By Mr. Critchlow:

Q. It shows on this little plat we had here yesterday?

A. Anybody who had studied geology, seeing quartzite there and knowing where the Ontario quartzite is, would know there must be a fault through the country in order to produce the quartzite here and then have quartzite of the same age, some other kind of quartzite, coming up here to it now of about the same age, there must have been a dropping of this quartzite here that appears to the southeast.

Another evidence of the fault is in the different character of the rock on the foot wall and on the hanging wall of this fissure. This is seen in a number of places, and the best illustration of this is the cross cut from the Hanauer tunnel from the Crescent fissure over to the head or in Level No. 2 of the K. K. incline, through the level over to where the fissure of the Columbia raise goes down in the hanging side. This is a blocky blue limestone, while the limestone on the other side as exposed in the K. K. Level No. 1 is a shaly lime. There is a very marked difference. The same thing occurs in the Apex tunnel where that cross cut to the hanging country shows very hard blocky lime, while the lime between this Apex first drift fissure and the Crescent fissure is a shaly lime dipping across the fissure. This lime at the face of the Apex level is a hard blocky lime, dark in color. The bending of the beds shows at the point where I noticed the different character of the rock; for instance, the Apex tunnel between the Apex first drift and the Crescent fissure, the beds are distinctly dipping towards the Crescent fissure to the southeast, and the same way in shaft No. 3 on the Monroe Doctrine claim. There is a shaft sunk in the hanging side of the fault, and

there are drifts down away runnings each way. Here the bedding shows a tilting up and the bed as it approaches the hanging side of the fault is in that position, or the bed is dipping off to the northwest, and there the faulting has thrown it down and flattened itself, so instead of being a natural dip it is flattened down while on the foot wall side it is normal. The foot wall side would not be flattened, but it drags down the edge so that it would have a tendency to flatten the natural dip down.

Concerning the question as to whether the fact that the drift at the top of the Constitution East and West drifts at the surface was driven by spiling if so driven, indicated that at that actual point it was soil or debris, I would say that it would not indicate it, because down in the Alliance tunnel, eighteen hundred feet underground, the same method of driving through the ground has to be used, that is spiling is driven ahead, so that the spiling driven in the Constitution East and West drifts does not indicate that that is soil or debris, but simply that the ground is loose and needs support. I find as a general thing, as to the condition of the rock in place as you get near the surface of a hill like this, that it is usually shattered more or less, but remains in place. The next point is the Elephant stope; I explored that stope and found there a bedded vein dipping to the northwest and very extensive. Some portions are unexplored—others can be reached; and from those that I have examined I am drawn to the conclusion that is a distinct bedded vein that apexes against the Crescent fissure and that on its dip extends to the northwest. I took some samples near station 2348-6 to illustrate the character of the replacement, the metasomatic action on the ore in the stope, which I have here. Metasomatic action means simply replacement of the limestone by the mineral and the making of ore bodies, of a bedded vein in limestone. I produce a sample taken at the point I indicate on the stope, on Exhibit A, about seven feet northwesterly from station 2358-6, within a few feet from the point which Mr. Wiley explained he took the large sample from which is in the box. I saw that character of rock in the vicinity of where I took this. I now produce a piece of ore, Exhibit 20, taken from the Elephant stope at a point indicated. It is now in its natural position and it is dipping to the northwest as it should. This shows the bending of the ore and also little breaks and fissures through the joints and cleavages of the rocks, and also the tendency of the ore at this end to slip down. This sample is taken on the dip while Mr. Wiley's sample was taken on the strike; and showing that this occurrence of the curling of the ore down has only formed on the joints and crevices in the breaking up of this big mass of limestone and you may have similar veins curling down like it is here on the dip as on the strike.

(The sample referred to was marked "Exhibit 20," was marked with a red mark on one exposure with an arrow indicating the dip, which was marked "dip.")

206 Q. Now, will you explain just a little more carefully just how the observer would stand in the stope looking at this?

A. The observer, as I take it, is standing now in the same line that

the arrow is drawn on top, looking down on the dip of the vein to the northwest, and showing as I saw the joints and [crevices] which had been filled with ore, even to the lime there, and sixteen inches in diameter. That is, the crushing of this mass of limestone allowed the mineral solution to eat that out to replace the lime. The piece of rock should stand a little over on edge tilted up hill at an angle of about fifteen degrees. On the right hand as we look at the vein (shown on the Exhibit) there is a fissure there almost a vertical fissure in it that has been filled up with ore, one side of which came in from other points probably, and on the left-hand side of the sample shows the ore going down the crevices of the rock. A portion of this rock was taken away and replaced by that (indicating). The top of this Exhibit 20 shows a bedding plane. The underside is also a bedding plane.

Mr. Dickson: We do not dispute that it is a bedded ore body.

Witness: I have three other samples. Exhibit 21 is a piece of ore from a place above this again, and in the bedding with the normal dip to the northwest. This ore is the thickness of that, and below it again,—that is about three inches to a foot,—and below that again is about ten to fifteen inches more ore, I then got the sample here exhibited, Exhibit 20; and below that the limestone with more or less ore all through it, but I would call it very barren not worth working. Then below this again about six feet is Exhibit 22, and this is from the foot wall, some of the ore giving a thickness there in this particular bed of about six or eight feet between the foot and the hanging, and still going to the northwest on the dip. This is not a fair representative of the quality of this six or seven feet of ore, as there is this barren three or four feet between the marbleized limestone.

By Mr. Dickson:

Q. Where was that taken?

A. This exhibit was taken from the northwest portion of the Elephant stope near station 2348-b, from the mass of lime between the hanging wall streak and the foot wall streak, and is simply to show how in the center of the limestone masses there is this replacement shown. This sample shows some ore around in the crevices, and was taken in the fissure. At this point a fissure that shows to the southwest from where I took this Exhibit 20, extends up, into
207 the country above in which I think are more ore beds, which I think I have described, but the [sample] does not represent the thickness I found the stope at that point. This is one making out in the upper beds and is similar to the ore occurrence on this side.

Calling attention to the appearance of the Crescent fissure where I observed it in the Alliance drift or Alliance tunnel over at the foot of the Columbia raise and in the Hanauer tunnel No. 4 away from the head of the Columbia raise, as compared with the fissure I observed in the work from the Elephant stope on up, and to the resemblance of the fissure in these outside points, I have to say that to the

southeasterly of the Elephant stope where we have the fissure, the drift continued in the fissure and has a general resemblance to it where we struck it in the other workings, the ore showing on the northwest side and the porphyry is on the northeast side.

The Columbia raise is all in the foot and hanging wall. All that can be said is that at the Hanauer tunnel, and I have examined it, and find the general characteristics of the Crescent fissure where I find it in the workings over the Columbia raise and in the workings of the Columbia raise up to the Constitution tunnel—that is at various points I have seen ore—Here at station 408 there is * * * which I think a fissure indicating a vein probably carrying quartz in the vein. So that the general features in regard to the contents of this Crescent vein [*are the same in regard to the contents of this Crescent vein*] are the same in the Hanauer tunnel and other workings on that level, and in the workings from the Hanauer tunnel up to the Constitution.

Relative to the geological feature upon the surface, which leads me to assume a drop here of some great extent—perhaps of a thousand feet from workings in other mines near there, I have made observations in years past in other workings upon the Daly-West and Daly-Judge which have a bearing upon the extent of the drop. I have been in ore bodies in those mines and find the ore practically next the quartzite, the same Ontario quartzite that we have in the Fairview spoken about. When it reached that point it must have dropped down. That is simply another feature I observed that tends to confirm my statement that there was a drop and the extent of the drop and that drop could be figured out with some reasonable degree of exactness, but not exactly on account of the workings in the lime beds that vary in their dip. You cannot figure on a constant dip.

With reference to this Columbia raise which goes up in a straight line to a width of some six or seven feet up that winze, it is not
208 to be expected that a fault fissure of this kind would be absolutely smooth, but it would change its course, its strike and dip. It would not be a perfectly smooth hanging or foot wall as a fault fissure. The plane may change from one slight angle of plane to another in a distance of several feet, and in that way it may take a different angle off so as to carry it down under the fault plane.

As to whether there is anything by which I could assume the exact direction of the movement,—that is, whether it would be a movement directly along the dip of the fault fissure or whether it may be a movement that one of the component [movement-] would be under the fault fissure and the other laterally. I have seen some indications that the movement may have been quartering from the true dip, that is the tendency of the throw a little to the southwest as it goes down, but are obscure from my observations up to date. I think they could be more accurately determined.

Calling attention to Exhibit 5, there has been placed upon the map an orange line westerly and northwesterly of the Constitution West drift and East drift, and extending out to No. 1 shaft; that was put there for the purpose of representing approximately the outcrop of the vein; it is approximately where I find it indicated where the

fissure would intersect the first drift of the Apex, and beyond that it does not extend for the reason the developments do not show where to put it, and I have seen no tracing outside of the testimony to show where it reached the end line. From the facts which I have detailed, and from the inferences which I have been called upon to draw from those facts, I will state that in my judgment the fissure shown in these workings and spoken of by me and other witnesses as the Crescent fissure is not a mineralized fissure. I believe it was a fault fissure.

Q. I will ask you whether in your judgment the ore appearing in the vein, the bedded vein, of which the Elephant stope is a partial development, is the same vein or a separate vein and deposition of ore from any of the ore which appears in the Crescent fissure at any point?

A. It is entirely separate; has a different angle of dip, practically dipping at right angles, and what little ore may be in the Crescent fissure may have been from the movement of the fault plane. In following down the fissure, there is no place, nor can there be any reasonable doubt upon the part of any person, any miner, as to when he is within the fissure and when he is outside of the fissure.

In regard to defendant's exhibit DD, the projection which goes through the Columbia raise, from my observation and in my
209 judgment there is no warrant or any justification whatever for giving the thickness of the Crescent fissure vein as it appears in the shaded portion from the two thousand horizontal line mark upward to the surface. I have already explained that the reason for not bringing these apex workings within the limits was because that is a separate fissure vein in the limestone, which instead of reaching out to the Crescent fissure is farther from it, from the evidence I have seen. The winze that is marked just below the Apex tunnel and near horizontal lines 2200 and 2300 is the winze that I speak of, and the lower portion departs from the fissure that I have seen up above. I examined the cross cut shown upon these maps and called the Stephenson cross cut. It is the cross cut southeast from the Hanauer tunnel, but does not show on the map. It is further to the northeast and was a cross cut going into the hanging wall for about 260 feet.

I found in about thirty feet from the face, a fissure cutting across the cross-cut with a strike at right angles to it and a dip of about 60 degrees to the southeast from the Crescent fissure. That would be in the hanging fault, about sixty-five feet nearer the mouth, where the Stephenson cross-cut reaches the Hanauer tunnel. I find another fissure and in that fissure a small occurrence of copper ore, on one side. That is a fissure also paralleling the strike and dip nearly thirty-five feet from the face and about a hundred feet back from the face. That is the only occurrence of ore that I have seen anywhere in the workings in the hanging country. There is an occurrence of ore in the foot country, in the Crescent drift as it is called upon [Defendant--] Exhibit A, at the point of station 352 between 352 and 353, at a point in the Crescent drift between [station-] 352 and

696—these stations are here connected in a line, but between those two there is a little mine working, and above the tunnel level there is one set more of timbers, and above that again the ground is exposed. At that point you find ore in the fissure practically paralleling this drift with a dip slightly to the southeast and at an angle of 80 or 90 degrees. That I have sampled, and it runs very well in silver, zinc, lead and some gold. It was apparent to the eye as being ore carrying those metals. There is a cross-cut drift from the Alliance tunnel level about four hundred feet back from the main Crescent fissure in the foot wall country. The ore assayed high values. The sample taken from the Stephenson cross cut assays very well and it looked like very good grade of ore, with considerable copper in the sample.

210 Cross-examination:

The Crescent Mining Company first commenced work running westerly from the shaft, during the time that Stuart Stephenson was superintendent, probably in the latter 1880's. I would place it along there that the original workings on the Crescent were commenced on the bedded vein and the ore shipped to the sampler. I could [now] say how long the Crescent Company continued to work in the ground shown by these maps west of the Aetna shaft, or easterly. They continued quite a while. There were some workings from the Aetna shaft which I believe were done by the Crescent Company later, and that was in a stope in a bedded vein on the other side of the hill, but I cannot say how long the Crescent Company continued in the ground shown on Exhibit [—], that runs from the Aetna shaft westerly. I recall it being called a fissure that the Crescent Company was working, but whether it was called actually Crescent fissure vein I do not recollect it by that name, but they used to talk about a fissure vein that the Crescent was working on. This vein, the workings of which were made by the Crescent Company, whether it was spoken of as the Crescent fissure or a fissure vein, was the territory that was referred to, I believe, although I have never been in those workings. I have heard the fissure spoken of as a barren fissure, fault fissure, among the miners, prior to the past few months. I remember Mr. Stuart Stephenson in talking of the mine at various times saying he was not doing very well.

About 1890 my study of the country led me to think that was a fault fissure. About 1890, in connection with a law-suit of the Mayflower and the Cleveland, we figured there must be a fault fissure through that country, and that this was probably the Crescent fissure. In answer to the question as to whether I ever heard, until the commencement of this law suit, any persons contending or expressing an opinion to the effect that the Crescent fissure was opened after the deposition of the ore that is found in and connected with it, and that it had nothing to do with the mineralization of that section of the country. I can only go back and say that at that time in 1890 when we were studying the country, we figured that the Crescent fissure must be a fault fissure. In some veins you could

have a fault fissure before as well as after the mineralization. I never talked with anybody. For instance, when I was down in the Crescent there was some Crescent foreman there—I was in this Crescent at that time, and instead of working in the Crescent fissure, as I recollect it, he was working in the bedded ore there, and he

211 said he considered that was what would save them—he was finding these bedded veins making off from the fissure vein, that you may call a fissure vein. That was virtually enough. I recall nothing that he said about the Crescent fissure having nothing to do with the mineralization that is found in the beds or in connection with it, but I do recollect that he took me to where the bedded vein made off from this fissure, and that that is the ore he was shipping to the sampling works.

On the assumption of the ore coming up if this Crescent fissure had been the source of the mineralization or the deposition of the ores found in the beds, I would expect it to be making off from the parent fissure. I heard no opinion from anybody who worked in the mine, foreman, superintendent, shift boss or miner, prior to the commencement of this law suit that the Crescent fissure which had been followed for thousands of feet in the workings, shown on this map more than a thousand feet, was opened after the deposition of the ore found in and in connection with that fissure and that that fissure had nothing to do with the deposition of the ore found in and in connection with it. However, I talked with nobody during these years, but with the knowledge of the country we have today, and as I see on that map, you know, a cross cut from this Crescent vein or fissure, or whatever you call it, where they are following out the country, and where they are trying to find the vein, we do not have to study that vein there. You can see them all along.

Q. You are asked to answer the particular question.

I did not, nor do I now consider the Crescent fissure open enough, to have permitted, or to permit the solutions from the deep to ascend through that as a channel to deposit the metallic contents in the beds, because this attrition material that I have referred to that forms the vein, would not permit the solutions to go in it, but prevent its going there for any distance in the places where the limestone is hard and *and* crystalline. There might be a good channel on the side of it, and immediately in [contact] with it in places, and usually that contact is this clay.

I am familiar with the ore bodies in the Grand Central mine which are in limestone. The ore body there extends for a very long distance, more than two thousand feet in an unbroken ore channel in the lime, not in the straight unbroken line, but waving, and formed by attrition. The maximum width in places, as where the northeasterly fissure cut through, and where the solutions spread out, I would not put at a hundred feet. There are only points like the Butterfly stope, where it reached that width. There are very small fissures cutting through that ore body. There are

212 fissures cutting through most all ore bodies. The Grand Central ore body lies more or less in a bed.

Q. What I want to get at is whether you did not form an opinion

and so express it, when the Grand Central case was being tried, that the fissure through which the solution came, deposited that ore body by the process of replacement where little narrow seams run through it not thicker than—not much thicker than this——

A. Why, that might have been my idea in regard to certain sections of it, but in other portions I think it was a gradual replacement more of the solid block—they didn't have seams to work into but just worked into the mass of rock.

Q. You then thought the little seams and fissures, we will call them, having a thickness of a quarter of an inch, were sufficient in dimensions to have followed the channel through which the solutions were ascending from the deep and replaced the limestone with ore?

A. They had been replaced on either side of these fissures for a distance of twenty feet up to fifty or sixty feet, whatever you say. These channels you refer to as being the mineral bearing channels while they may have at the present day appeared to be small fissures that you refer to, may at the time they were made have been much larger, and crowded together.

Speaking of the Crescent fissure, I don't know the conditions back of the time when those solutions came up; this Crescent fissure might have been very tight. It is better to assume a sufficient opening to have permitted the circulation of the mineralizing solutions. I think when these solutions came up probably the country may have been level. These ore bodies may have been formed before the upheaval of the mountain. I do not think that the mountain in which these lime beds are that contained these ore bodies that have been found, might have been tilted up before the mineral was deposited. I think the filtering was gradual during that uplift there of the whole country when the mineral vein was formed, and during that uplift of the whole country when the mineral veins were formed and by the final uplifting of the mountain due to this faulting they were thrown up, thereby exposing these mineral veins. It is not a pure conjecture that these mountains were not in a level plain at that time, but had a dip of 15 to 20 degrees, and that that uplift might have occurred before the deposition of the ores. I can't imagine that mineral came up and ran out in the lime beds and formed the ore right up to the surface today, or any other time.

Q. Why not? If they were tilted up in the position that they have now and then by fissuring, whether a fault fissure or not, why could not the deposition of these minerals have occurred after that?

213

A. Why, the great reason is the law of gravity that the solutions would go down—they would break out and run down in the gulches and would not rise to these mountain peaks. The altitude of the Crescent mine at the Mineral Monument is 9,400 feet high, and I cannot imagine mineral solutions ascending to that height with the large number of gulches and ravines cutting through, because I think the solutions would naturally tend to seek a lower level; even if they did ascend to that point they would never ascend to that mountain peak, but they would break out and be formed as we have them now in the Big back

stope, and would never ascend to the top of the mountain, but they do not come up in vapor, but they come in solutions, I believe. I don't know of any leading writers referring to the vaporizing action in connection with deposits of this kind. I do not know of writers, recognized as authority on geology, who express the belief or opinion and give reasons for that belief, that these solutions are carried up in the vapors, except in regard to certain deposits, such as mercury and some arsenical compounds. I think that these places in the lime beds that were once filled with ore and have been mined out, such as the Elephant stope, were formed by descending waters. I believe these cavities were filled by the ascending solutions replacing the limestone with ore.

Q. If this fault fissure had occurred before the deposition of the ore now found in the fissure and in the beds, you would expect to find the beds bending downward and coming in contact with the fissure just as you find them bending now?

A. I would expect the physical phenomena to be the same with the exception of where these bodies that are in the bedded ore veins that are now cut by that fault fissure—they have been formed in many places by the deposition of ore, and they are more bent down than they would be in the original limestone forming the original deposition. They would have been bent down by the fault fissure if the fault fissure had occurred before the deposition of the ore, probably very little; probably the line of fracture would be a very uniform one. The throw is a thousand feet. If there was hard lime rock I would expect to find a very sharp fissure just as you find in that portion of that fault today where you find it cutting through hard limestone. You do not always find the beds flattening as they approach the fissure on the foot wall side where they have not found the bedded ores. You can't tell how much these beds raised or where the fissure has gone through. The fissure may go through in one place and not in another, and for that reason you have got no positive dip on the bed to check it with.

As they appear the beds are bent down, but here they are
214 not, but I believe the big mass of the limestone here goes through.

Q. Did you not find evidences of the flattening of the bed on the foot wall side as they came in contact with the fissure or approached the fissure—where you have no ore of any magnitude, I mean?

A. Where the rock is hard, where there is thick blocky limestone, I could not say positively it was a bending of the bed.

I considered them hard to a considerable extent where there was no ore. It did not have any effect upon the beds of shale and the limestone. The limestone will bend to some extent. I find the limestone in places where there is no ore, bending and flattening—flattening as they approach this fissure inside of the fissure to some extent.

One of the reasons why I say that this fault fissure must have occurred subsequent to the deposition of the ore, is because of the fact that the lime beds where you have an ore body in the bedding

are bent more than they would have been if that was the fact. I did not find the bending to the same extent where there was no ore, except where it is—the bending is variable throughout. Wherever I have been able to observe it, whether I had ore or not, the flattening of the beds as they approached the Crescent fissure is variable; that can be explained more or less by the rolling of the limestone in this great uplift of this limestone bed. In the hard limestone, blocky limestone, I do not find the bending like I do in these soft shaly beds and near the ore. I think there is a bending in all the beds by the fissure, in some cases very slight, and that is in these blocky limestones. In one particular case here in the Apex tunnel I find the beds bend very much but not equal to what I found here in one case.

Q. Did you make a special examination for the purpose of determining whether or no the beds bent any more where you had bedded ore bodies than where you had this soft limestone and no bedded ore body?

A. I made the observation there where I found the ore had been detached from the bedded vein and pulled down.

In the Apex tunnel I found the bending there equal to some of the ore bodies, and I supposed there was a portion of the beds that had been dragged down in the fault fissure just like the ore body.

215 Q. Now, from the place you speak of in the Apex tunnel, did you make a special investigation for the purpose of ascertaining whether or no the lime beds where they were soft and where there was no ore were not bent as much by the fault fissure as they were where the bedded ore bodies were found?

A. I cannot say that I paid the same attention to those places as I did to where the ore was found.

Q. Did you make, apart from where you found the bedded ore bodies and where you found the limestone bending, as you have described, an investigation at other places where there was no ore, for the express purpose of ascertaining whether or not there was not some bending of the lime beds where they were soft?

A. I inspected some, and I made the investigation at such points as possible down through these workings, down through the Columbia raise from the Hanauer tunnel up to the Constitution tunnel. That is pretty heavily timbered. It is not possible to make this close investigation you are asking about.

Q. Did you at any time make an investigation for the special purpose of ascertaining whether or not the limestone beds were bent more, a bending due to the fault fissure, where you had a bedded ore body, than they were elsewhere where they were bent?

A. Well, sir, my special purpose there was to examine in regard to the ore body.

My opinion as a geologist is that the ore found in these beds, the bedded ore bodies, is due to the ascending mineral solutions; and they must have had some channel connecting with the fissure, I think, or a zone of fissuring, or some way, and maybe they came up partly

through one fissure and partly through another. I am unable to place them.

I have not been able to find and determine in my own mind through what channel the solutions came which deposited these various ore bodies.

Q. Now, assuming the fact to be as testified by the other witnesses that every one of the bedded ore bodies shown to the east of the point B connect with the Crescent fissure, and that there is continuous solution making out into the beds from the ore found in the fissure, and when you come down the Elephant stope you find the same phenomena, the ore in the beds coming out and in contact with the ore on the foot wall side of the Crescent fissure, would that have any tendency, in your opinion, to support the contention or theory or opinion that the Crescent fissure was the channel through which those solutions occurred?

216 A. I would want to see the occurrence of the ore there, and if it was similar to what has been spoken about last as being on the Elephant stope there, why, I would attribute it to the ore being dragged down, perhaps a section of ore from a bedded vein.

I am referring to the bedded ore. It was a section of the bedded ore taken out then by this fault fissure and dragged down and grouped up, and formed the ore in the fault fissure of the Crescent fissure. That would be my explanation of these ore bodies which we are talking about.

The big stope (Elephant) I don't know of any connection of the Elephant stope with the Crescent fissure and the ore bodies of the Crescent. I don't know of any connection between them and the Crescent fissure, and I have not admitted the fact that the Crescent fissure was the source of the mineral solution which came up and mineralized the beds, so I cannot see any connection between the ore bodies as I examined them through these different workings and the solution coming up through the Crescent fissure.

I cannot say that the bodies on the other side of the hill are in a different vein from this, dipping in an opposite direction, or that they are veins of the same character as the Elephant stope veins, because there is a possibility that before the great erosion of the country there, these ore beds, the particular lime beds that the Crescent ore bodies are in, may have made up the Crescent fissure. On the other side of the hill we have the bedded ore bodies coming up in a northwesterly direction at a dip conforming to the general dip of the lime beds throughout.

I really don't know whether on the property in controversy, we have the ore, the bedded ore bodies lying one above the other and going downward into the earth and always in a direction that has brought everyone of them in contact with this steep pitching fissure. I have never been in those workings.

Q. Assume that these bedded ore bodies instead of being found when you go down to the deep, conforming to the dip of the lime beds, they do upon the opposite side down there, and that we find the

one above the other in such a position that brings them from the top to the bottom of each one of them in contact with that steep pitching fissure. Wouldn't you then say that they were in two separate veins?

A. No, sir.

From the observation I have made in the Crescent fissure at other points where intersected, or has cut into the bedded vein, I
217 say it is the ore that was rubbed from the bedded veins that has been found in the fissure.

Q. Wouldn't you say that the vein on the opposite side of the hill you refer to which is conformable from top to bottom to the dip of the beds for very long distances, while on this side of the hill we find bedded ore bodies and that they lie in the ground and being deposited in such a way as to bring them always in contact with this fissure which dips at an angle of 55 or 60 degrees, wouldn't you say that the ore bodies found on the ground in controversy, bedded ore bodies, belong to a vein somewhat distinct from the veins on the other side of the hill?

A. I could not say. The mineralization was different. I would say that they belong to separate ore bodies now as we see them today.

Q. So, if I do not misunderstand you, the fact that these ore bodies, these bedded ore bodies, I mean, each and every one of them, if found in juxtaposition with the Crescent fissure, and that at each and every instance you have the ore in the fissure and the ore in the beds, not separating them at all, continually—and notwithstanding you find that none of these ore bodies, no bedded ore body, which is in contact with another, would not influence your judgment one particle in determining whether or no the ores as found here are referable to the Crescent fissure or have any weight with you at all?

A. If you will permit me to answer the question, I think I can take it up probably the way you want me to. The important thing is these ore bodies in the fault fissure conform in a general way to the strike of the bed, so it is what we call a strike fault. Naturally bedded ore bodies cut by a fault of that kind, the bedded ore would show coming up the fault fissure. We can assume another fault running to the northwesterly there through that country, and it would cut these bedded ore bodies just the same, but in a very different position and under different conditions, and drag ore in, and you would have the same occurrence with levels trending off there to the northwest just as we have them to the northeast and southwest, the fault would be followed and the ore would be encountered on the dip of the ore beds instead of on their strike. So that, the reason you have the beds coming up to this fault is because it is a strike fault, and of course naturally cuts the ore beds across them in the direction of the strike, and naturally it butts up against it. I think that explains the way you find this bedded ore butting up against the strike fault in that way, as I say, and assuming a northwest and northeast fault, then you have them butting up on their dip, and you have a different condition, but you still have the drag ore in the fault.

218 Q. Do I understand you that you wish to be understood as saying that the fact that every bedded ore body that is found in the ground in controversy is found in contact with this Crescent fissure? and that in every bedded ore body so far developed in the ground in controversy the ore in the beds makes out and connects with the ore in the fissure; that there is no bedded ore body yet found which is found in contact with another fissure than the Crescent fissure, would have no weight then in—would have no weight whatever with you in determining whether or not these ore bodies were referable to the Crescent fissure?

A. I would consider all that, but my conclusion would be just as I have heretofore given it; but there is one wrong statement; I claim that there are other fissures in that country—you have eliminated other fissures except the Crescent fissure. Do you mean that? Because I have shown here in other fissures throughout the country—

Q. I am speaking of these bedded ore bodies and not the ore in the fissures. I am speaking of the bedded ore bodies?

A. Yes, sir.

Q. I will ask you to assume, Mr. Wilson, if the ore shown on Exhibit CC as stoped and as extending from the Level No. 1 up through the Stephenson stope, through Rich's stope, through Mike's drift, and thence on up to Pete's drift, and then on up the rise to practically the level of the Simpson drift is all in this Crescent fissure, that it varies in width from a maximum so far as measurements have been made, from three and a half feet in thickness to ten feet in thickness, none of it bedded, you would think that ore was deposited from solutions flowing upward through the Crescent fissure?

A. If it is a mere assumption of that kind, Judge Dickson, I would not know; that is, that longitudinal projection shows bedded stopes there that make up that continuity, and because of that fact it is very different from where you are assuming that the fissure is filled with ore.

Q. It is in testimony that there is continuous ore, a continuous stope of ore through this fissure from the No. 1 level up to the Simpson drift and not in the beds, and it is of a length easterly and westerly as varying as shown upon Exhibit CC. Assuming that to be the fact, would you say in your opinion that was drag ore and was not referable to any deposit from solutions that had flowed upward through this Crescent fissure?

A. I would do a good deal of thinking, not having seen that, to account for that occurrence. As far as my observation in the rest of the mine is concerned I have found nothing like that, although I would assume there must be a fissure vein carrying that in there, and that has become entangled in the Crescent fissure, to account
219 for that continuance here through these stopes, just as we have the other vein encountering the other fissure in the Constitution tunnel and mineralizing it there

Q. My question embodies the assumption I asked you to assume in answering, if this ore to which you have referred in the Crescent fissure and standing there in the way that I have asked you to assume, you agree with the opinion expressed by Mr. Bochmer in

answer to the same question, that that had been dragged in from bedded ore bodies that had in past ages been lying above it and carried there by erosion or that had been deposited there as a secondary deposit from the downflowing solutions?

A. I would like to see the character of the ore that occurs in there. If I saw that ore and say the way I saw the ore in this Exhibit, why, I would assume that it came from bedded veins along it, and more thickly than at other places in the mine so as to make continuous ore in the fault and through the stopes of the mine.

Q. I say if, notwithstanding you found a continuous bedded body in the Crescent fissure for the length easterly and westerly that this map shows and for a distance upward and downward as the map shows, all in the Crescent fissure, none of it in the beds, none of it in any other fissure, you would do a great deal of thinking before you would come to the conclusion or the determination whether it had been deposited from ascending solutions flowing through the Crescent fissure.

A. Not if I had my knowledge of the Crescent fissure as I have of its appearance in other places.

Q. With all the knowledge that you have of the Crescent fissure in other places, you would say, would you, that this ore body so found in the Crescent fissure and having a dip of 50 degrees, the dip of the fissure through that section, was not deposited from solutions which flowed through that fissure, would you?

A. I would surely have to see such an occurrence as that in that fissure to come to a conclusion at all. I cannot imagine it. I can see a fault fissure there that has cut ore bodies; it may have cut veins, may have cut fissures carrying lead ores, that might make this body you are referring to, but I can't see any reason for that amount of ore in that fault fissure.

The only way I could explain it is the bedded veins come there at shorter intervals and they made a continuous showing of ore down through these stopes.

I think they were bedded veins, making out three feet and a half and from that up to two hundred feet at the greatest point from the fissure.

220 Q. Now, I say, I ask you to assume the greatest thickness as you go up from three and a half to ten feet, and it is there in the fissure as testified to, and upon your assumption that it has made out in the beds and it is in contact with the vein, then would you think if that were so it would not be fair to assume that it had been deposited from solutions which came up through that fissure?

A. It is very strange to find that occurrence there, and so much of the ground open in these other levels, and no similar occurrence of that kind, and I would say if you found that ore to that amount you ought to find it in the Hanauer tunnel and extending up to the surface.

There are barren places for great distances on the dip and strike of all veins.

Q. The fact that it did not go down to the Hanauer level would not have any tendency to show that the ore we have there was not deposited from solutions coming up through the Crescent fissure?

A. Possibly the ore through there may have been raised and flattened out again in another place in the Crescent fissure, if you want to assume ore in it.

Q. The fact that the No. 1 Level and the Aetna tunnel level to the west of where this ore body is shown, carries no commercial ore, would have no tendency to show that the ore shown in these stops above the No. 1 Level was not deposited from Crescent fissure solutions?

A. It might be a shoot of ore and it run out, and the ore might not extend on those levels.

On section CC, as I understand it, it is drawn through the Baskin stop.

Q. So far as the sections were produced to show occurrences of ore in the beds in connection with that fissure, that part of it is only through the Baskin stop?

A. Well, what I wanted to refer to is just these barren places showing the Crescent fissure by your own cross sections over, for instance, to here, and that is not continuous ore through there, the same thing here, and there is no ore shown from there to here. There are some dotted lines there which may be in ore, but it shows the ore not continuous, and you show your bedded ore in the Baskin stop on these sections, but there is not a continuous sheet of ore making in the Crescent fissure that I can see from your own map.

I took sections from this map, but I could not get sufficient data to confirm those sections from the map.

Q. It is a platting of notes made at the time the work was in progress?

221 A. That platting of notes is not sufficient on Exhibit A for me to plat, but assuming that, that this plat is a correct representation of the facts, it shows the ore in the fissure going up from Level No. 1 and continuing in several places.

Q. Now, the fact that between the Baskin stop and Level No. 1 there are places where there is no commercial ore or stoping done on commercial ore in the fissure, would that in your judgment tend to exclude the claim that the ore found up here was in a fissure and which came from solutions flowing through the Crescent fissure?

A. No, sir; with all your assumptions and my knowledge of the Crescent fissure, I would assume another fissure, a mineral bearing fissure coming in contact with the Crescent fissure to make that showing. I would assume that, not because it is indispensable to the success of the plaintiff, but just from my knowledge of that fault, the Crescent fissure.

Going in the direction of these ore bodies, or practically so, when we come down to the Hanauer tunnel level we find bedded ore

rock

bodies both above and below practically in the direction of the work. And this ore, these bedded ore bodies, are in contact with the Crescent fissure ores. It is my opinion from the examination made that there is no ore found anywhere in this Crescent fissure, except ore that has been dragged into it from bedded ore bodies or leached down into it from bedded ore bodies.

I did not go up the chute shown on Exhibit CC which goes up near the bottom of the Aetna shaft from this Hanauer tunnel level between stations 329 and 408. There were no timbers at this point running to the southwest of the Aetna shaft and to the westward. I sent a man to explore around there to see if [—] any accessible place that he could find, and he went up the Aetna shaft and he said "You can't get up there". I was out there on Saturday last. I probably heard the testimony introduced on behalf of the defendant to the effect that eight hundred or a thousand tons of ore had been taken out in that line of work in the fissure, and I assume that you are stating it correctly, but I do not recollect it, because I was not paying much attention to it in regard to the amount of ore that came from here; but if there were the approximate [tonnage] stated, found there in the fissure and extending from the Hanauer tunnel level to No. 3 level, I would not think that had been dragged in. I would think that would be the intersection of another fissure with the Crescent fissure. In fact, the character of the filling there leads me to think there is another fissure in that vicinity.

222 From my knowledge of the Crescent fissure I would not conclude that the ore body mentioned, though found in the Crescent fissure and continuous in the Crescent fissure for that distance between those levels, was deposited from solutions that came from that fissure. I would figure if there was that amount of ore that there had been a practical union with a fissure that came from some other direction and joined with this. I did not see a fissure there, but I saw a different character of material there in this portion of the mine than I did in any other portion of the mine. It was very silicious quartz and some manganese. This was in the vicinity of the Aetna shaft. I did not find in the fissure, whether dragged in or otherwise, ore that is very silicious. I believe that at the Aetna shaft is the only place where I can find quartz except some places I found silica in the limestone. There is probably some silica in the vein too, very little, but nothing like that amount found at station 408. I produce a sample of it. This specimen came from the Crescent vein, according to the testimony, in the Antelope tunnel, * * * feet east of Mahoney raise, and I took a piece of it, broke off a piece of it and took it with me to see whether it was quartz. There is some quartz in it and some lime.

Sample 17, taken from the Elephant stoep, of ore in the beds in the Crescent fissure, contains considerable quartz, but I think the majority of the ore in the Elephant stoep is very different from that, and the gangue of it is lime, and the silica would not probably amount to over five or ten per cent. The quartz in sample 17 I think would be probably more than 50 per cent. Another difference

I find in the ore along the 400 Level in the vicinity of the bottom of the Aetna, is there is manganese with quartz. I do not recall finding it at any other place in the Crescent fault. I don't recall any other difference in the ore in the mine east and west.

I agree with what the witnesses have testified to, that the 400 Level from a point easterly of the Aetna shaft, thence on westerly as far as displayed upon the maps, has been driven upon the Crescent fissure. I found ore just west of the Aetna shaft in the 400 Level, but not further west than the Elephant stope, that was different from ore to the west, more quartz, very silicious and some manganese. It was taken out within the confines of the crushed material that is enclosed in the Crescent fissure.

Q. It was taken out of the Crescent fissure, was it not?

A. [I-] would make a distinction of the Crescent fissure fault, you know, and simply entangled in that way in the fissure. The walls of the fissure are disclosed and the fissure is not wider
223 than the drift. I think in many places here the fissure just occupies a narrow clay seam there right in the drift. That is all there is to it. This ore that I found differing in character I think originally came from outside of the fault fissure, and I think it was dragged in there, probably run in the fissure at that point. The fault fissure in other words intersected another vein. It is not a bedded vein there. I account for the occurrence of ore in the raise going up from the 400 to the 300 Level upon one of two assumptions, either that it was dragged in from some bedded ore body that lay at a higher level, or that it was deposited where it is found today from another fissure which I have not found, although it is found in the Crescent fissure. I do not assume that it is from a bedded vein. I rather think that was another fissure.

Q. So far as the country has been developed as appears upon Map Exhibit C and my Exhibit A, and the testimony on behalf of those who did the work and were familiar with it when it was done, there would appear to be no bedded ore body cut either by any of the levels above the 400 and immediately above where we find this ore in the Crescent fissure from which it could have been [draggen] in, unless there had been a very considerable lateral as well as downward throw, is there?

A. I am assuming that it was not [draggen] in from any body of ore there at all. It was another vein came in. I [I] wish to be understood that in my opinion it was dragged in from another fissure vein. I think probably a fissure there and that the fault intersected the fissure and dragged some of the fissure ore into the fault at that point. Knowing that it was claimed or had been testified to that there was ore in the Crescent fissure going up that raise just east of the Aetna shaft of the magnitude of 800 or more tons already in the fissure, when I was back there the last time I didn't go and examine that point and see what indications there were, if any, to support my belief or opinion that that ore was [draggen] in from some other fissure, and was not deposited there from solutions which flowed through the Crescent fissure, because I did not know that it was ac-

cessible; another reason was I went to the stope in the K. K. incline and down in the Elephant stope, and I did not have time to go there the last time, which was last Saturday, and I returned Sunday.

I found ore in a few places in the 400 level. I don't think it was in place. I think it was drag ore that came from outside the Crescent fault. The filling of this fissure is finely broken and crushed into small particles on the plane of movement, the attrition material on the plane of movement. The contents of the fissure are from what have been adjoining beds, but the amount that has been
224 dragged I do not know, but it is derived from there. In a great many cases there is a plane of movement, and there may be two planes of movement between which you will find drag ore. In the Crescent fissure in some places it is about three or four feet wide; in other places it is just a seam, but all crushed material. I did not take any ore out of the 400 level between the Aetna shaft and the head of the Columbia raise. I saw some, and picked into the side of the drift. I just saw it through the lagging. It was not in place standing on the wall. I looked at it as a mass of crushed material; it was not standing on the wall at all. It was back of the lagging, and I think the lagging was put up there to hold it there, but I did not determine the extent of the ore at any place.

I think I have been through that portion of the drift in the 400 level between the Aetna shaft and the head of the Columbia raise three or four or five times, but I did not go along and examine it with my light probably more than two or three hours altogether. It was just as one would walk along the drift and look at the sides, stopping frequently, when there was an interesting point. I have not been able to determine how much of a lateral throw occurred on that fault fissure, but I think there has been a slight throw to the southwest. The evidence of a lateral throw was such as I saw on portions of the wall where I thought I detected indications of a throw that was to the southwest. This was in the Apex tunnel, about the only place I recall. There was no porphyry at all—and the hard walls of the fissure came very close together. I called Mr. Boehmer's attention to this. I don't know whether I was with him or not. I made no note of it. It was not particularly one of the features I was examining, although any indications of the faulting I looked at. And though there was ore at frequent intervals as shown and testified to in the 400 level between the Aetna shaft and the head of the Columbia [a] raise, and in the Crescent fissure I think it was all dragged in there. I think it was rubbed or dragged from the bedded veins in there, except that there may have been other fissures that were intersected by the Crescent fault and ore dragged in from there.

From my examination of the ore found there, to which I am referring, I would attribute all of it that I have seen in the Crescent fissure to ore dragged from the beds, but ore which I don't think came from the beds came from some other fissure, as the ore up in the Constitution tunnel came from that fissure there. I said that the ore found in the Crescent fissure in the 400 level from the head of the Aetna

shaft to the head of the Columbia raise was, in my opinion, dragged there from the beds or from another fissure. I have not found any other fissure there, but the answer is correct, as the character of the ore indicates that there was another fissure west of the Aetna shaft.

I examined the Hanauer tunnel easterly from the shaft some distance. That is where the Stephenson cross cut is open off there for four or five hundred feet, and it was about the same so far as the ore occurrences were concerned for the distance I did examine it to the east, as that portion to the west of the Aetna shaft until you get to the Columbia raise; there is considerable resemblance. I think there were fissures, and are today, from which it could be discovered from which the ore was dragged, by proper investigation; but outside of the bedded ones that I know of I don't know where the bedded ores came from. I don't know the particular fissures. There are no beds of ore which would account for all as drag ore, the ore that I found in the Crescent fissure throughout the extent of the 400 level, as far as the same has been examined by me, but I account for some of it from the beds and some by intersecting fissures.

Q. Is there any bed of ore known to you and to any of the witnesses thus far called which will account for all [of] any of the ore which you found in the Crescent fissure in the 400 Level easterly of the Aetna shaft, as far as you examined easterly therefrom, until you get as far west as, we will say, Raise No. 3, going from the 400 Level to the 300?

A. It is only in a few places that I found ore there, and never having explored these upper workings I cannot say anything about the beds there. What ore I found were occasional occurrences in through here, and were very few.

I am not able to point out to the court any bedded ore body which could account for all the ore found in the Crescent along the 400 Level to the extent which I have examined it easterly and westerly from the Aetna shaft and to Raise No. 3, because I have not examined those workings. But, though I know of no ore body or fissure which would account for it, yet my conclusion and opinion is that all the ore found along that distance was dragged in from some unknown source. However, the ore occurrence there is very meager. The Apex tunnel started in a drift on the fissure, and apparently, as far as I could judge, was started with the intent of following the fissure. In my opinion, those who started it made a mistake in getting out of the seam about fifteen or seventeen feet down the winze.

226 The actual excavation shows that it goes down on the fissure to the bottom on a dip of about 41 degrees.

Calling attention to the K. K. incline going from bottom of the Reimer's raise, I went down that about twenty feet, and found a bedded ore body as I went down to the right; afterwards by recent work the ore found to the right of that K. K. incline has been driven across to the left, to a connection with the Crescent fissure foot wall. There is no ore in the Crescent fissure on its foot wall side. The ore that has been shown in the bed has bent down. The fissure is on

the hanging side of it. I mean that the ore is bent down to conform in direction with the fissure. That is the way I account for the position of the ore which is claimed by other witnesses who have been upon the witness stand as being in the fissure. The ore which is found in the fissure does not extend above the beds in here. I have no note of what I observed there. I do not always make notes as I go through, but generally do so. The new work was driven to the left about thirty six feet from the center of the K. K. incline, before it encountered the fissure that is on the hanging side of this ore body; and that was on the foot wall side of the Crescent fissure. The work has been continued about thirteen feet, according to my measurements, into the Crescent fissure, and the hanging wall I believe was found when the lime beds were found. So I had part of it ore of the Crescent fissure, part of it some porphyry, and beyond that I found the lime. I told you the width I measured was thirty six feet, and that the lime beds were thirteen feet out from this thirty six feet which is gouge material, and then we came to some porphyry, and then beyond the porphyry are the lime beds. The fissure there is just the width of this attrition material. I do not say that the distance between the foot wall and the hanging of the fissure is thirteen feet. The thirteen feet was driven cross-wise of the vein, at right angles to it. I found the lime; I found the hanging wall of the fissure, I say, about a foot beyond where the ore was. This attrition material is what I call the fissure, and beyond that was porphyry, and [beyond] that the lime beds.

Q. And if you said before that work was driven thirteen feet in the fissure in there, or in the hanging wall, you did not mean it?

A. I meant just what I described, that the thirteen feet is attrition material and then the porphyry and then the lime beds.

Q. And then do you have any attrition material beyond?

A. No, sir.

227 I don't recollect finding any fissure on that side of the porphyry, though I was looking for everything. The dip of the foot wall of the fissure where I discovered it was about 50 degrees. I don't know if the K. K. Level No. 1 is any part of these workings on the Crescent fissure. A raise going from the K. K. Level No. 1 is shown on Exhibit DD upward for about fifty feet. I was right under, but I was not up it. I don't recall seeing that raise there—that would be after you go down the Columbia raise back around to your left facing southwest. I am unable to tell anything about that raise, what it is in, but I saw ore there in the face, and it must have been directly under it.

I went through the Johnson winze, and gave it such examination as could be made by the facilities I had where it was not timbered. I did not find in it carbonate and galena ore on the hanging wall of the Crescent fissure standing in place twenty feet down; that is from the Constitution tunnel twenty feet down the Johnson winze. I tried to examine it, as I wanted to see what ore was shown. I did not find any ore, drag or any other kind. At a point eight feet from the bottom of the Johnson winze I did not find in the Crescent

fissure carbonate and galena ore standing in place somewhere as shown by the raise; nor did I find any drag ore. I would liked to have found it there and examined it, if it was there. I have seen ore along the Antelope tunnel east of the Mahoney raise, whether twenty-three feet or more I don't know. I saw several places with ore, but it was not in place there. All I saw was drag ore. Whatever ore I saw in there east of the Aetna shaft in the Hanauer tunnel I considered was drag ore. In the K. K. No. 1 level looking easterly from the Columbia raise, I did not find ore standing in place in the Crescent fissure; there is ore back from the fissure in the foot wall side, but there may be a little drag there in the fissure. If there is any in the fissure it is drag, ground up, and the ore was filtering down. I would say that the foot wall on the fissure has been reached by that cross cut to the northwest. The Columbia raise there is in the hanging wall. The bottom of it is in the hanging wall of the porphyry. At the point where I found the foot wall this drift runs on the strike of a fault and then cross cuts into the northwest. The cross cuts referred to are shown on Exhibit A, a little back from the face, I should say five or six feet; it is in the hanging wall line; it goes out from the Columbia raise. I should say all within a few feet of where the Crescent fissure runs through in the ore is in the hanging wall country. The ore shows in the fissure at that point, practically at the face of the cross cut at Y, the foot wall of the—the drag ore stands with the dip of the fissure. While it occupies a position that is coincident with the plane of the dip of the fissure at that point it has been dragged there from this fault. It is standing; and they run the drift through it and into the bedded ore; and that drag ore is standing there today, held up by the walls on the side of the drift.

Starting at the Engine drift in the Columbia raise and connected with the Columbia raise for a distance of a hundred and twenty feet, as you go up the Columbia raise from the Engine drift, I saw ore in the Columbia raise at about that point. I did not measure it accurately, but there is ore that appeared there below the landing of the raise there. It stands with the dip of the beds but not with the dip of the fissure. I think the fissure is back of the bedding.

Q. Does not the fissure or ore there found, hasn't it been stoped out in running the Columbia raise up there at intervals as the ore was taken out at intervals for a distance of twenty feet above the Engine drift?

A. No, sir; I saw that because the timber was off, but I did not see above the Columbia drift up in the raise. I did not see the fissure in the raise where I was in there. The Columbia raise there does not go up in the Crescent fissure; it is right in the beds. The fissure may be exposed in the back of it? but I could not see it. I was not there when it was driven.

Referring to the junction of the two branches of the Engine raise at Station 2612, as you stand there looking southwesterly on

the strike of the fissure, I did not observe there a smooth hard hanging, with a soft streak composed of solid sulphates of lead, iron, zinc and indications of copper, or copper stains. I saw what shows as you look southwesterly. It shows on the slip, and I took it as drag ore from this ore that we saw coming down the Columbia raise. [Thr] ground up ore there is conformable to the dip of the fissure. As I told you, that ore is right on a regular slip, and on the hanging wall is this ground up ore right on the foot.

I was in the Custer drift, but did not observe there a very high grade of ore, frozen onto the wall and standing with the fissure, but I observed a good high grade ore on the right hand side in the beds. There may be ore standing there with the dip of the fissure and making out from the hanging wall of the fissure and going into a bed and standing there in the direction of the fissure, but I don't recall it, because that is where the fault fissure is cutting right across the bedded vein. I observed in the Hanauer tunnel opposite the top of the Columbia raise a streak of galena ore a few inches thick showing on the north side of the level and dipping about 45 degrees to the northwest. That does not go down
 229 in the fissure, which at the top connects with the Crescent fissure and goes down at that dip of 45 degrees to the west and connects with a flat stope there, but is in the solid hard limestone about an inch and a half thick, as I recall it, and the ore was zinc, lead and iron. It was brought in by solutions. The dip of that is about 45 degrees to the west. It was steeper than the normal dip of the bed. I considered it no more than this same line—breaking of the limestone, carrying ore off in every direction. From the bottom of shaft 3 a cross cut cuts through a dike. I find crushed material on both sides of the dike there, and porphyry in between. I saw the motion at one time on one side and at another time on another—the great fault moving and showing motion on different planes at different times. In that connection, fault fissures are often valuable fissure veins. The great Ontario fissure is a fault fissure. I think the widest place the Crescent fissure had was there at the southwesterly end of the Hanauer tunnel going off in the old workings. You could see it on the top of the drift three or four feet wide. That is the widest I observed outside of the shaft I spoke of. There it is four or five feet wide between movements of the planes at different times. In places I considered it just a seam in hard rock coming almost together, *[and in places I considered it just a seam in hard rock coming almost together.]* The fissure as you go along the Apex tunnel level from Station 2737 to the second west drift from that tunnel level is six inches wide; it may be larger or smaller there. The entire country between these two drifts making out from the Apex tunnel, are shown to be, as you travel along the Apex tunnel, dipping to the southeast, but having a less dip than the Crescent fissure. I took the dip of the included territory. I speak from going through there and observing it by the light of the candle. I made no effort to take the dip, except with the eye.

Mr. Dickson: I would like to recall Mr. Brooks to prove the correctness of this plan map marked "Exhibit UU, J. W. C."

The Court: You can examine the witness upon the theory of the correctness of it and prove it afterwards.

Q. I will ask you to look at map marked Exhibit UU—you see indicated there on the K. K. Level to station 2881 and 2847? I will call your attention to the Columbia raise as you go up from the K. K. Level No. 1, station 2881, as far as represented upon Exhibit UU. Then I call your attention to the K. K. incline and the stope which, when you first went down the incline and you find in the beds to the right of the incline——

A. To the right off to the northwest.

Q. And then to the new work which went up to where you intercepted the foot wall of the fissure, as you claim it to be?

A. Yes, sir.

230 [Q.] That has been projected west fourteen feet. At this end you will see the upper end of that line of work is being projected westward a distance of seventeen feet.

[A.] You say the lower is projected fourteen feet?

[Q.] Fourteen feet.

[A.] Well, where is the corresponding point on the plan?

[Q.] That is where you intersect the fissure.

[A.] Where is it represented on the plan?

[Q.] It has not been put on the plan, because the intersection was not made at the time the map was prepared.

[A.] There is no certainty about that point.

[Q.] You have the position from that projection of the K. K. incline. [—] Now, here is a new work that went off from it, and you say you went up there how many feet to where you intersected the foot wall of the fissure?

A. That is thirty-six feet from the surface to the K. K. incline, the map being on a scale of five feet; it would be fore-shortened some by some projections.

Where the red line is intersected it is about thirty feet. There is encountered the foot wall of the Crescent fissure; thirty-six feet. I encountered the hanging wall of the Crescent fissure. I encountered what I considered the foot wall of the Crescent fissure or fault vein. The porphyry was not disturbed there.

Q. I call your attention to Mr. Bochmer's [Exhibit-] No. 10 and No. 11. You observe, do you not, that this is in the Crescent fissure lying below the porphyry and porphyry lying above it?

A. That is the K. K. Level No. 1—why, this is not the same place.

Q. It is going up to the K. K. Level No. 1?

A. How far it goes I don't know, because there is no scale indicated. This is a section of the vein as encountered over here in the workings,—it has not got anything to do with the projection on the K. K. incline.

Q. Let us see if it hasn't. Where it connects with the Columbia

raise Mr. Boehmer testified that this little drift ran easterly a very short distance?

A. Would be about twenty-five feet below the——

Q. The K. K. Level No. 1. You will observe it has a scale of fifty feet to the inch?

A. Possibly that much, but I don't know.

Q. Now, then, Mr. Boehmer testifies that this square was intended to represent a section cut through that little drift just a short distance, twenty-five feet below the K. K. Level No. 1?

A. That is not below the K. K. Level No. 1; it is on the K. K. Level No. 1.

231 Q. It is on the same level?

A. Yes, sir.

Q. As the cross cut?

A. Yes, sir. This is supposed to be a projection right in this cross cut here in No. 1 Level.

Q. It would not appear so from the map Exhibit A? I am speaking about this little cross cut?

A. That little cross cut is running to the northeast.

Q. I don't care what way it ran. It was through that drift, that short drift, that this section, according to the testimony of Mr. Boehmer was based, and as represented on it by this square. Now, you see he represents the Columbia raise there—doesn't he?

[—]. Yes sir.

Q. And he represents the Columbia raise as lying immediately below the Porphyry, doesn't he?

A. Why, no. You must get that straighter or I can't answer your question. This is a cross section through No. 1 Level, K. K. Level. The Columbia raise is out in the hanging there, in the hanging country, dipping down through the Hanauer tunnel.

Q. Is not this intended on Exhibit 11 to represent the Crescent fissure below the porphyry?

A. It is a raise.

Q. Is the Crescent fissure represented there?

A. Yes, sir.

As you travel above and below the K. K. Level and at a particular point as it passes as far as it is shown on this, the Crescent fissure is not represented as being below the K. K. Level No. 1. None of the Crescent fissure extends below there; it just reaches the level. It extends from the K. K. Level upwards above the K. K. Level. On Exhibit 11 the hanging wall of the Crescent fissure is represented as lying below and in contact with the porphyry. That then would be the line of the Crescent fissure as depicted upon Exhibit 11 as being in contact with the porphyry and would be the hanging wall of the Crescent along that line, considering this selvage material and the attrition material—I found the foot wall of the Crescent fissure thirty-six feet from the Center of the K. K. incline, corresponding to this wall here. I had this attrition material, which might be ground-up porphyry.

Q. What would be in a scale of five feet to the inch if this were the foot wall of the Crescent fissure and what is showing here on Mr. Boehmer's map Exhibit 11 would be the hanging wall of the Crescent fissure, what would be the width? Can you tell?

A. Why, roughly, these are only pictures, as I understand them, Mr. Dickson. That represents it about six feet thick.

232 Q. But if the hanging wall was found where he has represented it here—the Columbia raise lying here and going up isn't it in the hanging porphyry?

A. I ain't sure—oh, yes; that would be on the line of the raise. That is right.

Q. That would be on the line of the raise. Now, [if] the K. K. Level No. 1 you have the hanging wall where Mr. Boehmer represents the Crescent fissure as represented by that Exhibit of Mr. Boehmer's, and if you have the foot wall of the Crescent fissure as where you encountered it, and it is represented upon Exhibit UU, what then would be the distance between those walls?

A. That is where I encountered the foot wall of the Crescent fissure fault.

Q. You are making that right where the work was projected?

A. Yes, sir—I don't want to go upgrade; I can shorten it somewhat.

Q. That would be further back than you are pointing?

A. Yes, sir.

Q. Have you any objection to making a measurement?

A. Not a bit.

Q. Taking the—what would be the width of the fissure taken on a true section?

A. You have got to assume the fissure is on the same dip through the two sections down here. Now, I don't know as he shows it. As he shows the porphyry he does not know just how high that wall is up.

Q. Can you give us any idea, Mr. Wilson, if you have the hanging wall as represented by Mr. Boehmer on Exhibit 11, the hanging wall disclosed in Level No. 1 as you found the foot wall where you discovered the fissure, can you give any approximation or idea of what the width of the fissure would be between those walls?

A. I could not unless I could work it out more carefully, and I would have to work it out from the plan.

Q. Can you work it out?

A. I think evidently I could.

Q. Will you work it out tonight?

A. Yes, sir; if you will give me accurately the courses.

Mr. Dickson: I will have them given to you accurately.

The depositions of ore bodies in the limestone I think disintegrates it to a considerable extent and they do not occupy the same space. I mean to say where the bedded ore bodies are found in contact with the Crescent fissure that the fact or presence of the ore would make the beds more easily bend as they approach. The presence of the

233

ore is one factor, and the dissolution of the limestone by the carbonated waters eating away part of the rock, is another. That is true not only in the vicinity of the bedded ore, but where there is no ore; but here there may be an accretion of lime, and be an increase in the volume of rock. Here we have a drop fault. I really have no idea of the distance, but I put [—] [as] over a thousand feet; that is, over a thousand feet the Crescent fault fissure cut what I call the apex of the bedded ore body found in the Elephant stope. It is not in the beds there; it is very hard rock there where the ore occurs, hard marbleized limestone. In section 10 the ore from the Constitution tunnel almost down to the K. K. Level No. 1 is represented as not having been flexed or bent along the fault fissure,—but that is only an illustration of the mountain. It seems to be a free hand sketch, the way it shows, and from the K. K. level up, it shows a flexing generally. Just a little above the K. K. level down to drift E the beds are represented on the foot wall side of the fissure as flexing or bending, flattening where that ore body is encountered; that is the general picture representation there. At the Elephant stope the beds are in their normal position on the foot wall side of the fissure, except this flexing here at a drift, at the Engine drift. My explanation of why the beds are not flexed there is because of the large ore bodies found are very hard and marbleized. The lime has been marbleized in places by the ore.

I have never been in that portion of the drift shown on the Elephant stope between [Station-] P. 57 and P. 68, and then on the southerly face. It is caved in for a ways. It is not on the Crescent fissure. I found ore on one side, on the north side of the drift. The Crescent fissure was a few feet wide there. I don't know what the course is of the Crescent fissure from Station 60 as represented upon Exhibit 18, taking it as you go to the west, because I have not been in there. I don't know whether you find the Crescent fissure there on the southerly edge of the Elephant stope. I think in there it is oriented. I do not find in Exhibit 18 the Crescent fissure on the southerly edge and in contact with the ore in the Elephant stope, as the fissure is run according to this plan here.

Q. It says Elephant stope bedded ore body apex on that Crescent fissure?

A. On the Crescent fissure?

Q. The Crescent fissure is running in this direction as is shown from Station P 57 to P 59?

A. No, sir; the Crescent fissure leaves this drift just at the bottom of the raise and runs off in this country.

Q. But it does not go out south as is shown upon Exhibit 18, does it?

234

A. There may be a drift there, but I don't think I was ever in it.

I spoke about the lime beds in the vicinity of the Elephant stope and in the stope, being marbleized. It is really in the stope I observed it. I think marbleization can only come from immense pressure of the beds above. It is my opinion that it was a porphyry in-

trusion came in there in a heated condition, and I would expect in the vicinity of igneous rock that the limestones would be marbled. I would expect the porphyry when it was intruded to be heated to a great degree, and that would have a tendency to marbleize the lime in places at some distance from this fissure. I find that at the extreme limits of the Elephant slope where I took this sample that the lime was marbled. That would be a distance at right angles to the Crescent fissure of about a hundred and fifty to two hundred feet. It scales a hundred and seventy-five feet according to the plan map. I think that the ore found in the Elephant slope was deposited after the intrusion of the porphyry dike, and it is my opinion that the ore found in these beds, or found in the country in controversy, was deposited there before the tilting of the beds.

I have testified that there must have been fissures. My theory was while the beds were still in a horizontal position before the first uplifting probably fissuring began, and as the uplifting began there was a gradual uplifting of the sedimentary formation. I think the fissures were opened after there had been some uplifting. Dynamic forces certainly did open fissures and I think those openings have made secondary deposits, leaching probably from the original ore bodies.

Redirect examination:

I answered Mr. Dickson that I had not been in the workings which seems to be marked as a raise on the Crescent fissure at the bottom of the Aetna shaft, and I do not know whether they are open or not. What is marked upon the plan map Exhibit A as the winze in the Hanauer tunnel from the bottom of the Aetna raise and downward from that was not open at the time of my examination, and I know nothing as to what is shown in that winze.

Q. I observe on that winze, and in connection with it the words "small fissure of ore." That is on the map of Mr. Brooks, Exhibit

A. Now, examine that winze and assume that there is a small fissure of ore in that winze going down which is inaccessible, and observing the direction of the incline which runs upward from practically that same point to the Hanauer level, I will ask you

235 what that would indicate to your mind, as to what the miner had followed in opening the raise?

A. A small fissure containing ore different from the Hanauer tunnel fissure, a little fissure cutting across there.

Q. From the appearance upon the plan map, and having no other information about it, and taking into consideration also the legend on this plan map in connection with the word signs, state whether or not that would seem to indicate a crossing of the fissures across the Hanauer level at that point?

A. Yes, sir; it would indicate that fact.

The Antelope tunnel, shown in Exhibit A, from the Mahoney raise where we come down from the surface in a southerly direction, is open for some considerable distance. It is not open as far as

shown upon Exhibit A, as an incline working marked "Apex raise." I did not actually measure it, but I should judge it run up there for that distance. On Exhibit A, at a point which scales a hundred and fifteen feet from the bottom of the Mahoney raise, is a legend "caved 1911." That approximately corresponds with the place where I found it caved and beyond which I was unable to go in that level. There were a lot of timbers in that drift and we had to climb over the top of them. At the end of the drift as far as I was able to go around the timbers, I observed a small fissure I could not get to, which seemed to go up in a northerly direction, and dipping pretty steeply. It did not correspond to the course of the Crescent fissure; it was running more north. The drift was run in the Crescent fissure itself as far as I was able to go in.

I did not state on cross-examination to Mr. Dickson that I regarded the vein in the Elephant stope and the vein from which the Crescent fault ore body had been worked in the extreme right hand part of this map as being the same vein, or that I was uncertain in the point. If I did so answer, I misunderstood the question, because I consider the Elephant stope and Crescent stope an entirely different bedded vein.

My attention was drawn by counsel to Exhibit FF and to that part of it which represents a section through the line E on the plan map. I observe upon that section what appears to be a projection in hatched lines of something which is marked "White vein." I have examined the map Exhibit A to discover whether there are any workings therein which represent anything or which is marked in any way to represent a "white vein." There is nothing on the map that I can find on the plan map to [incidate] a white vein, and that is one of the reasons why I say it is impossible to determine
236 the accuracy of these sections from the plan map.

Q. I wish to call your attention still further to the plan map and with reference to these sections and what they may represent, to a series of hatched lines which apparently represent conventional outlines of stopes and particularly to one which starts from the head of the Reimer's raise as shown upon the plan map, and runs in a general southeasterly direction, and then by a curve taking a general northerly direction. Am I correctly tracing that particular line with my pointer as it runs northerly and then easterly and ends at station 499 on Level No. 2?

A. Yes, sir; you trace it correctly.

Q. Now, is there any other line on that map that you can find from your examination that corresponds to any other outline of that stope if it be a stope?

A. No, sir; I have looked for it, but I do not find any other point. I do not find along or in the vicinity of that line any elevation marks or stations which enables me to trace in any manner the outlines of that stope, if it be meant for a stope; it ends and has its termination in No. 2 Level, which seems to terminate as a station there, but whether above it or below it or on a level, there is nothing to indicate it. That is one of the elements on this plan map which makes it

difficult, if not impossible, to determine what would be shown by any section through it; it is difficult to know what that line represents, and if it does represent a stope it should be enclosed some place.

Cross-examination:

The stope just referred to I find by crawling on top of these timbers past the ore there and at a point about where it measures a hundred and fifteen or a hundred and twenty feet, looking at it with a candle there it looked as though there was a fissure making more northerly, on its strike. I could not get to it, because it was very dangerous looking ground and there was no room in it to get in there. I got within four or five feet of it. In connection with it I could see the vein off from the main Crescent fault. I could not see that distance to tell any more about it than I thought it was a fissure making off to that point. I am not sure that I could see the wall because I think it was cleavage in the rock, or some cave off there from the fault plane, but I could not get right up to it. It is not merely a conjecture on my part; it is what I saw there. Perhaps it is a conjecture on my part, as to whether a fissure—I don't know absolutely whether there was any continuance of it, because I could not get right to it.

237 In my direct [—] I pointed to a place in the Alliance tunnel where I found a fissure and some quartz. It was at the middle of the workings shown at this point marked "raise" nearly facing 352. There were two sets of timbers, a tunnel set and one above it, and then on top of that is where I crawled in. That is the extent of the work that had been done, about two sets in length. On its strike it was exposed for about fifteen feet, and was observable about fifteen feet at the top of those timbers. It was not disclosed in the bottom of the Alliance tunnel; I did not examine it all the way. I could not examine [for] it in the bottom, because the track was there. The only place I saw it was at the time, for about fifteen feet up the level. There was a little ore there when I left, but it had been practically taken out. I took a sample of it and there was not much of it. The fissure and vein material was continuing in a northwesterly and southwesterly direction while the ore I took out was at the easterly end. The strike of the fissure was about with the Crescent or Alliance tunnel.

Redirect examination:

As I recall, at the end of the Antelope tunnel as far as I was able to go, and at the point which is approximately indicated by the words "caved 1911" the drift there was a breast board there of some kind.

Cross-examination:

I did not ask or suggest to have it removed. I could go in to examine more closely. I observed it first with Mr. Boehmer; we both went in there, before we took any testimony in the case. After

that I was upon the ground to examine it for about eight days. I saw Mr. Blood, the superintendent, while there. I think I met him on the road going up there, but I can't recall whether it was after I had seen what was in that fissure. I made no [effect] to see him and no effort to have any obstruction removed so that I could satisfy myself whether my thought or conjecture was correct or not, but if I had gone that far, why, there would have been a hundred places I would have asked him to remove and try to get into these upper levels here in the vicinity of these stopes, and it would have been utterly impossible in the time that we had to have done what I would liked to have done. I did not ask or suggest to have any [constructions] removed anywhere.

NICHOLAS TREWEEK, a witness produced by complainant, being recalled, further testified:

238 Cross-examination:

While I was driving work on the Crescent fissure in the Hanauer tunnel or No. 3, I think I had not been in any of the workings which were then being carried on, or theretofore had been carried on by the old Crescent Company as shown upon this map. I had been on the Crescent fissure. When I was driving the 400 level on the Crescent fissure, I was doing that as manager of the Alliance Mining Company. It was commenced, I should say, along from 1885 to 1887. I have no recollection of ever being in the old Crescent Company's workings after the shaft was started.

O. A. PALMER, a witness produced by the complainant, being first duly sworn, testified:

Direct examination.

By Mr. Critchlow:

My age is seventy-three, and I have resided in Utah about thirty-eight years. My profession is mining engineer; I have practiced that profession ever since 1864. I had a technical education [is] mining engineer in the University of Wisconsin.

I am familiar with the Park City District as a whole. In the course of my professional work as a mining engineer, I have had occasion to make [examination-] of other mining districts lying contiguous to the Park City district. At one time I was connected with the mine known as the Ontario mine in Park City in the capacity of mining engineer, and as consulting mining engineer, and in charge of their engineering work. I was also at one time connected with the Daly Mining Company in the same capacity. I was connected with the Ontario a period of nearly thirty-four years. Beginning a year after the discovery of the mine in 1874, from the time of the discovery of the mine I was connected with it. During the course of my employment I became thoroughly familiar with the

geology and with the mining developments and openings in those two mines. It became a part of my business to understand, as far as possible the geology of the ground in which those mines were situated.

I have made an examination of the ground embraced in this controversy. At the request of the plaintiff I began special examination with reference to the issues here involved a week ago. My examination covered two days underground, and I was there four days. There was no opportunity to make surface observations, as the ground was covered with snow, but I had been over the ground often prior to that in previous examinations, so that this territory, so far as the surface was concerned, was not unfamiliar ground to me.

239 I examined from the surface at the Crescent fault fissure, so-called, down and through various inclines and raises to the Hanauer and beyond that to the Alliance tunnel; then throughout the length of the Alliance almost completely and practically all of the Hanauer tunnel. I seldom make notes in examinations and I did not in this instance. I carried with me at the time maps of the workings and openings that had been surveyed up to that time, and these are the workings which appear upon these maps here in court. I saw occurrences of ore at various places, and made an examination of the Elephant Stope so far as it could be examined; it was badly caved.

Q. I wish that you would in your own way give us the results of your examination, with particular reference to the connection [*with*] the Elephant stope has to the Crescent fissure, as you observed it, in the workings, for the purpose of giving your opinion and the reasons for the opinion as to whether the ore in the Elephant stope is in or connected with the same fissure or vein, if it be a vein, which is shown in the workings from that to the surface, and which we have been accustomed to call here the Crescent fissure vein, and without further questions from me; I wish you would detail in your own way your reasons, giving your observations founded upon your geological experience and otherwise that you may have to offer?

A. The Constitution tunnel and drift is the nearest one to the surface, about not more than thirty-five or forty feet below the surface. That is run several hundred feet on a fissure that is opened through a porphyry dike, the porphyry being there first, and in the fissuring it fissured along through the dike leaving the porphyry sometimes on one side of the fissure and sometimes on the other.

From the Constitution tunnel we passed down through an incline to the Apex tunnel, the most of which is in the hanging wall. Just below, the Constitution tunnel leaves the vein and goes into the hanging wall into a granite—and that comes back again into the vein a short distance before reaching the Apex tunnel. From there down to the Hanauer we follow on the foot side of the fissure. From the Hanauer down to the Alliance the drifts, inclines and so on are in the hanging wall of the fissure; in one instance they cut back to the fissure and in the other instance in the foot wall. They cut and follow it through to the hanging and reach the fissure. The fissure

exists continuously all the way from the Constitution tunnel down to the Alliance, reached here and there with drifts from the incline, at times in the foot wall and sometimes in the hanging; so that there would be long distances you would be in the incline and not in the vein at all or in the fissure, but at the Antelope tunnel you
240 come again into the fissure: and in leaving the Apex tunnel drift, we are in the fissure.

We have that down to the Antelope, and then following along quite a long distance on the Antelope level upon the vein, and then cross cutting towards the mouth of the tunnel we come to another fissure, a fissure which is also found in the Apex tunnel. From that we start out from the Antelope tunnel for a few hundred feet only—I did not go to the mouth. I then came back and passed down or out from the Antelope tunnel, passed down the incline through the Hanauer, passing several drifts, and find that the drifts were mostly in the foot wall, occasionally exposing the vein or fissure by cross cuts from the Hanauer down to the Alliance. The drift or incline was run fully in the hanging, but before it gets back to the vein the fissure is shown, and in places ore in it.

The ore I don't think was formed from solution in the vein, but was brought into it as a drag, so to speak, brought into it from other ore bodies previously existing, which had been cut by this so-called Crescent vein.

The Elephant stope at the end of the Alliance and all of the ore that I have seen there, was one bed in the lime, the bed dipping slightly to the northwest fully on the under side or foot wall side of the fissure. That had extended out from the lime beds for quite a distance along the McKay cross cut and the mineralization in the beds was probably eight feet at least thick in places, but not all, but eight or ten feet and the lime beds are here and there mineralized the mineral lying wholly with the beds and not with the fissure. Through the Elephant stope too there are a number of small vertical fissures, probably ten of them perhaps, for I counted as many as that. They are small and narrow nearly vertical and are undoubtedly fissures from which the mineralization came that was deposited in the beds.

The fissure itself, so-called Crescent fissure, on its course to the southeast, is found for a long distance from the Alliance tunnel. From that it crosses the Anchor tunnel and appears again in the Daly and in the Ontario, and passes along in its course westerly a long distance through the Ontario, but not quite to the limits on the east. The fissure there is practically barren. It cuts the Ontario and the Daly and has a little ore in it that is dragged in, but through the places we have found that fissure it is practically unmineralized except by such as has been dragged in by the cutting of these older ore bodies, but on [on] the fissure on the east end of the Ontario are two fissures of a series that probably was the latest of everything in that district, later than the mineralization and later than the
241 porphyry even. The porphyry was the first appearance; and that connected, all of it, practically all of it, with granite mass at the head of Little and Big Cottonwood Canyons. That granite

mass in the form of an ellipse practically has a course [northerly] and southerly from Mill Creek over to the head of American Fork Canyon, a distance of at least fifteen miles. The minor axis of that ellipse is nearly east and west for a distance of six to eight miles. That mass is granite. It has been intruded into the sedimentary beds and when cooled probably several hundred, if not several thousand, feet of beds, sedimentary beds overlying it. When that was intruded into the beds they were lifted up in a dome shape and when they had reached the limits of the uplifting these figures were made as we naturally expected them to conform rudely to the granite mass. They have extended out beyond the granite for very long distances, varying in width, some of them nearly vertical. The molten magma that came up and formed in cooling the granite, forced its way out into these fissures and there cooled very quickly, being narrow and small in mass, and cooled as all porphyry cools, from the same source.

Succeeding that solidification of the granite and the porphyry, the lime beds became mineralized, mineralized by vertical feeders, and subsequent to that there came a series of fissures, of fault fissures lying generally along a course parallel with this granite outcrop, they becoming mineralized, that being the second series of mineralizations.

Included among these fissures is principally the Ontario mine and the Daly. All these fissures were found extending the whole length of this porphyry outcrop all the way from Millcreek to American Fork Canyon and lying along the flank of [granite]. There are various other mineral districts located along the flank of granite, such as Mill Creek, Little Cottonwood, Big Cottonwood, Uintah, Blue Ledge, American Fork and Snake Creek. They are separate and distinct mineral districts by reason of geological boundaries but from a geological standpoint they are a unit of one. The conditions are similar, if not exactly the same, throughout. The dikes and porphyry bodies throughout the rock covering of the mineral districts, are of the same character, have the same source, and when the mineralizing solutions came in these fissures as an evidence that they were later in age, they cut all of the dikes, and cut all of the beds.

After that had ceased for a time there came still a later disturbance, causing or producing a set of fissures, barren fault fissures, one of which is the Crescent fault fissure, and another one lies at the east end of the Ontario mine. Upon these there has been a good deal of movement. There is some ore in both, but in every instance it has been dragged in. In other words, it has come in from ore that has had a previous existence either in the beds or in the fissures. That I think covers the series of events that seems to have any bearing whatever upon the ground in contention, or any that is adjoining it.

Q. I would like to have you detail just a little more fully, if you will, the facts which lead you to say that the fault fissures were later, the latest of all, and that there was movement upon these fault fissures including this Crescent fissure, if you have anything to add to what you have said?

A. The fact that they are later, that it is later in age, is pretty well established by the fact that it cut every body of porphyry and displaces everything that it comes in contact with, cuts every mineralized bed that it meets, cuts the Ontario, and in fact cuts every ore body that I know of up there, and every body of porphyry, so it naturally must have been later in origin as we do not find anything that has cut either of these two, and presumably that is later. It is observable from the maps and sections in evidence here, that so far, at least, as the developments have gone they show no ore in this country here under observation.

The hanging wall of the fissure is evidence that it was a fault fissure from the fact that it cut all the dikes and all the lime beds. It has cut the lime beds that carry the ore in the Elephant stope. On the hanging side of that fault fissure the corresponding beds to the Elephant stope are not in sight; they are not found. They have been misplaced—thrown up or thrown down and I have no doubt [what] what it is a downward movement and a normal faulting. Where they have gone to, the developments do not show.

Q. So far as we can see the Basset edges of the beds through which this Crescent fissure has cut these workings in the hanging wall, is there anything that is observable, that would give you any reason to believe that if the Crescent fissure were a fissure carrying mineralized waters, those waters would be for any reason inhibited from mineralizing those beds in the hanging wall, or so far as is observable, are those beds equally susceptible to mineralization if the mineralizing waters came up the Crescent fault fissure?

243 A. I think they are, because there is no apparent difference between the beds on either side of the Crescent fissure, that is, as far as the structure of the beds are concerned; they seem to be of the same general nature, the same degree of hardness and about the same susceptibility to mineralization, but are mineralized only in the foot side of the Crescent fissure, and not on the hanging side; they do not match there. There has been a movement so that whatever of these beds formerly existed in the hanging country of these fissures are not there now. They are raised up or thrown down; in all probability have been thrown down. It is a normal fault in which the hanging has gone down, and we would not expect, unless the dip was such as to bring other mineralized beds down in touch with it, an ending of ore on both sides.

I have given it as my opinion that the fault is a normal one. It is based on facts shown in this ground in contention and in the continuation of that fissure to the southwest a thousand feet or more in the Daly and Ontario. There is, I think, no question of doubt of its being the same identical fault fissure going through the Ontario ground. It has moved. The hanging has gone down. The horizontal movement is not a great deal, probably sixty five feet of horizontal movement, but what amount of vertical movement went with it we have not yet determined or worked out. I presume the facts are there that it could be determined, but it never seemed

important enough, or, at least, I have not worked it out. The country has been cross cut so often through the Ontario and Daly that I think there can be no doubt whatever of these various points at which we have the fault fissure, that it is the same fault fissure, and, as stated, my opinion is that this Crescent fissure is the same one; but when you leave the Daly ground and go towards the Alliance, in which I think is identically the same fissure, there is a space of ground undeveloped and through that it is a matter of inference to a certain extent. Now, in the Anchor tunnel it crosses there—then it is picked up in the Alliance, but the distance between the Alliance and the Anchor is several hundred feet, and in that distance there is no development, and there it is a matter of conjecture as to its being one and the same; but in the absence of being able to fit any two together as having the same general conditions, the cross cutting of the country in various places all indicate a series of fissures such that we would be in doubt how to correlate them, I think there is little or no doubt left that it is identically the same fissure.

244 Q. What would you say from your observation and learning in matters of geology as to the likelihood of two fissures, both fault fissures, both fissures of great extent upon their strike and of profound influence upon the country rock, existing so nearly in parallelism as against the inference you draw that they are the same [fissure-?]

A. That might not be in the case of a series or group of fissures very much alike with the same general strike, but I say in the cross cuts in that section of the country we do not find any group; we find a main fissure, and only one of any moment—there may be small or little ones, but only one of any moment, and from the general character and appearance of the several fissures at various points, as far as observed, it is a reasonable conclusion from a geologic standpoint, that it is all one and the same, outside of these wide places where there is no development.

When I speak of this Crescent fissure as being *an* non-mineralizing fissure, I mean it has no mineralization of its own; it is that which has been dragged into it, just the result of cutting ore bodies previously existing in other beds, and other fissures, as the case may be. From my opinion and description of the *genises* of this particular vein or fissure, I would not expect to find, nor do I find, any mineralization outside of the walls of this fissure either upon the hanging or the foot wall side, excepting such mineralization as comes from other and bedded veins. There is mineral in various places, ore in various places as you go down the incline, that appears to make into the bedding; there is some in the fissure itself scattered here and there which is enclosed within the walls of the fissure, but from all appearances was not deposited there originally, but is simply dragged from bodies lying above or below in the beds, or in other fissures, if it cuts other fissures.

The composition of this filling of the Crescent fissure differs in places. Where it passes through a porphyry dike, as it does, and

cuts it, the contents of it would be more like porphyry. Then when it passes through the lime, the lime is more or less crushed, giving an average width of two or two and one half feet, but beyond the fissure on either side wherever cross cuts have penetrated it by the way of tunnels approaching the fissure in the foot wall country and the continuation of them at times over into the hanging of the fault, the [rock] is very hard and the lime not crushed, very solid, and when crushing occurs, as a rule in a fissure, it is confined to narrow limits, not over two to two and a half feet as an average—some places narrower and some wider. Referring to the statements made that the contents of this fissure where it is wet, at least, is mud, it is my judgment that it is formed, the bulk of it evidently, of that so-called mud—and is from the deposition with the vein crushing, leaving more or less porphyry in places within the walls of the vein or fissure. Now, the deposition of that has simply converted it into clay and then where it is not passing through the clay, or passing through the porphyry, or passing through the lime, the lime is partially crushed.

In the bending of the beds up against one side of the fissure and down against the other, in accordance with which way the motion went, the motion is down, the hanging having dropped down, there is not that much bending of the bed which it would get against the like as against the foot of the fissure. The beds in the foot have been curled up or down—I should say been curled down by the slipping down of the hanging, and on the other side they have been bent up by the same motion of slipping, showing evidences of motion, but that alone would not make the amount of motion where the lines are practically the same on both sides, and you have got to look to something else to establish the amount of drop.

I wanted to state in reference to a further disturbance of the bed surrounding that mass of granite, that if you will lay a belt around here anywhere from about ten miles wide and circle that dome of granite some fifteen miles long, you will find that every pound of ore that has ever come out from a half a dozen districts, has all come from the limits of that belt, and that for miles beyond it, no mineral or ore has ever been mined. It is simply a unit there by itself, and one of the most important. If I spoke of seeing granite going down the Columbia raise, I mis-spoke myself and meant porphyry.

Cross-examination:

The great Ontario mine is in the fault fissure. A part of the underground workings shown upon the map, Exhibit A, such as the Hanauer tunnel and the Antelope tunnel, I examined over twenty years ago. At that time the Hanauer tunnel had been driven westerly, not to the Antelope or Elephant stoep. I think it had gone past the Aetna tunnel, but not a great deal. I could not say how far westerly of the Cumberland it had been driven. It is in the vicinity of the Aetna tunnel. The balance is recent comparatively. I don't think I ever examined the underground workings since that time until I examined them for this case. I left here a

week ago last Saturday for that purpose, and I returned, if I remember right, on Wednesday afternoon. On Saturday I went underground about 10 or 11 o'clock in the morning, and that was
246 in the Alliance tunnel. I left the underground workings that day at 4 or a quarter after. About 11 o'clock I got underground again. I left the underground workings that time by way of the Hanauer tunnel, about 4 or a quarter after 4 in the afternoon. Monday I did not go underground. On Tuesday I did; and Wednesday I came home. Tuesday I did go down. I was down there three or four hours on Tuesday. I examined the Alliance tunnel, all of the main tunnel to the McKay cross cut, a distance of five hundred or a thousand feet. I entered the Alliance tunnel and commenced my examinations at the mouth and examined it clear into the McKay cross cut, and four hundred feet perhaps beyond, but not to the face. That distance I don't think is more than two miles. I made the same kind of an examination that I always make; a careful examination to ascertain the formation of the beds and fissures and whatever there might be in it, and did it so carefully. I was occupied in this examination of the Alliance tunnel on the two occasions that I was in there maybe four hours. I examined the Hanauer tunnel. The length of it from the mouth up to the Columbia raise and just a few feet into the tunnel beyond the K. K. incline. There is some ore, I think, beyond, which I did not examine. I went from its mouth to as far westerly as the head of the Columbia raise. I can tell positively the distance I examined the Hanauer tunnel with the same degree of care, as I did the Alliance tunnel. It took me about eight hours to go through the line of workings from the Alliance tunnel down to the Elephant stope. That was made in two days, the first from the Constitution tunnel to the Hanauer and the next occasion we took up the fissures in the Hanauer and then went to the Alliance and these two periods together would amount to from six to eight hours.

I spent in my examination of the Hanauer tunnel a couple of hours more. We passed through it on two different occasions. When I was examining the Alliance tunnel I was looking for the Crescent fissure and any fissures that I could find and for the general structure of the rock in the tunnel and whether it was lime or quartzite, or as to what it was, and about how it dipped and so on, as I generally do in making such examination. I was taking special pains to find where the Alliance tunnel cut the Crescent fissure. It is difficult to get through the line of workings leading from the Elephant stope up to the Constitution tunnel, due to a heavy flow of water, and in two or three instances there were chutes that crossed it to carry down the waste from one or two places, and it was very difficult to
get over it. It would take considerable time simply to go
247 through the line of work from the surface down without my examination at all, because of the slowness in getting through and the great amount of water that was found in there and the difficulty in keeping a lamp lit. It would take one-half the time to pass through that line of workings as I ordinarily would without making any examination at all. In my opinion, the Crescent fissure

ore was after the mineralization. It is later than anything in that ground or the adjacent ground. It is my opinion that the Ontario fault fissure in which the great Ontario mine ore bodies lie, opened before the deposition [get] into it.

Q. How is that fissure as to direction compared with what you assume to be the Crescent fissure as developed in the Ontario mine?

A. They approach, converge to the west and diverge as they go east, and I should say at the widest part they were pretty near a thousand feet apart. Out to the west the Ontario fissure, or I mean what we call the dislocating fissure on our map, which I see is the same as the Crescent fissure, they come very close together. The dip of the Ontario vein fissure is to the northeast, directly opposite to the dip of the Crescent fissure. I do not know whether between the two here is what is called a block fault, a drop of the country, unless perhaps reference is to what we call the spur vein that runs from the Ontario fissure and to the Daly fissure that may have some reference to it. The two fissures are going down nearly parallel. Now, suppose the Ontario or the Daly fissure formed first, started down, carrying with it all that hanging country—it looks as though the block between the two had sort of lagged behind and the Ontario fissure formed, and goes on down, one lagging behind a little and the other going ahead, and permitting the two to come in that drop, that block between the two showing that the motion has not been directly with the dip but has been a little quartering, the result of that has been to shear that block between the two; therefore, the four cross fissures, these cross fissures are all more or less mineralized. The distance from where you have what I call the Crescent fissure developed in the Ontario and Daly over to where you find it in the Alliance tunnel at the Elephant slope is about two miles.

Q. How far westerly of where you have it developed in the Ontario or the Daly is it before you have it developed again, what you believe to be the same thing?

A. The first development must be in the Anchor tunnel is about four or five hundred feet from where I saw it in the Ontario or Daly.

From the Anchor tunnel to where we have what I believe to be the same fissure developed again in the Alliance, would be, I think, nearly a thousand feet. That would be undeveloped ground.

Redirect examination:

By Mr. Critchlow:

The fissure in the Ontario which I identify as being the one we call the Crescent fissure here, for a good many years, for want of a better name, we call the Dislocating fissure, putting that upon our maps for many years in that way, and after it had been found by others and been on our map a number of years, I happened to examine in the Hanauer and Alliance at one time talking to Mr. Chambers and Mr. Eshelman, and at their request I went and examined the ground, and it was then that I believed that these fissures

were one and the same, and since that time I have on one or two occasions had occasion to speak of them and then I said they were one and the same. The development of that is called the Crescent fissure in the Hanauer tunnel as well as its development in the Alliance tunnel and a part of the data from which I formed this opinion.

Cross-examination.

By Mr. Dickson:

The fault fissure which has been developed in the Ontario and Daly I never called the Crescent fissure, but simply called it a dislocating fissure; and the Crescent was not named the Crescent fissure then that ever I knew of. That is a new name to me entirely. It was first the Sampson fissure. I never heard it called the Crescent fissure before property I have heard of [—] years, but not that part of the picture which you now call the Crescent fissure, I did not then recognize it as the Crescent fissure, or know it by that name. But years back I have heard that portion of the mine that is here in controversy spoken of as the Crescent mine, but not as the Crescent vein. Before the Crescent, it had another name entirely, it was known as the Rebellion and California and Climax; they were the owners before the Crescent, and I think there was a half a dozen fissures, but no one particular fissure was called the Crescent.

Mr. McHugh: It is stipulated by the parties that it may be considered as proven that Nicholas Treweek and J. Leonard Burch, the grantors of the complainant, were the owners of and in possession of an undivided three-fourths interest in the Conkling and Arthur lode mining claims from May, 1906, until September, 1908, when they conveyed to the complainant.

Mr. Dickson: I don't know. You have examined the records and say that that is correct.

Mr. McHugh: Yes; that is correct. It is just covering a question which may not arise.

249 WILLIAM A. WILSON, recalled for further cross-examination, testified as follows:

Cross-examination:

Calling attention to Complainant's Exhibit 5, and to the streak of ore that was referred to in my testimony, that was seen as you go down the K. K. incline through the K. K. Incline I measured on the Crescent fissure from—but I can't scale it on the map on this course, as that 36 feet is on an angle of 12 degrees, but allowing for the 12 degrees, it comes pretty close to twenty-five or twenty-six feet. That would be near enough but it is on a different line. This raise given by Mr. Blood goes up south 43 degrees west—it would be really south—I have indicated where it would go on this section that I constructed here to answer that proposition of Mr. Blood's.

Complainant rests.

Defendant offered as surrebuttal, the following:

GEORGE D. BLOOD, heretofore sworn, testified:

Direct examination:

Was present when Mr. Boehmer was testifying with reference to what he called a dislocating fault fissure, which was discovered and developed in the Daly and Ontario and which he thought was identical with the Crescent fissure, this fissure that is found on the Ontario and the Daly-West, and as such is developed in the direction of this property in controversy. It is in the Crescent from the Daly No. 2 shaft in a northerly direction. With reference to the distance that the country between that point and the point where the Crescent fissure is developed in the Alliance tunnel, is undeveloped, I have to say that there is a tunnel known as the Anchor tunnel cross cutting this tunnel. Between the Alliance tunnel and the cross-cut in the Daly of which I spoke, and which if the fissure exists there, does cut that fissure, and it would be at least two thousand feet westerly of this cross cut in the Daly; and all that intervening two thousand feet is wholly undeveloped.

Q. And between the Anchor and the undeveloped country what is there, so far as this territory is concerned, between the Anchor tunnel and where you get it in the Alliance tunnel?

A. There is no certainty in my mind where we cut it in the Alliance, and I have heard the testimony of witnesses, and even Mr. Treweek's answer as to where he cut the Crescent fissure, or where it was cut in the Alliance tunnel, and except at the Elephant stope, it would be a distance considerably exceeding a mile on the strike of the Crescent.

250 I knew of other fault fissures, paralleling or practically paralling the Crescent fissure. They lie to the north or northeast of that fissure and parallel to it. They are cut in the Aetna tunnel. They are represented by two dikes, one about four hundred feet from the mouth of the Aetna tunnel, a fifty foot dike of porphyry, and one similar about five or six hundred feet further south, a big dike which is twenty five feet thick; both of them dipping to the south. The strike of those fissures is parallel with the Crescent fissure, with the dip to the south at about 60 degrees angle. At least one dike is cut in the Alliance tunnel. It is eight hundred feet from the mouth of the Alliance tunnel where the south side is thrown down, and we pass from the Ontario quartzite. The first eight hundred feet of the Alliance tunnel being run into the quartzite, and then passing to the limestone through a porphyry dike. This dike extends to the southwest and in connection with that ore has been mined in the claims formerly owned by Mr. McGregor. At a distance of five or six hundred feet [feet] further in the Alliance tunnel there is a fissure which is filled with loose brecciated material, and in which I have never seen any porphyry at all. It is barren, dipping to the south and parallel with the dike that I have just spoken

of. It is north of the Crescent fissure, and parallel with it out there it would be in the neighborhood of fifteen hundred feet away from it.

Q. In your opinion from the lack of developments in the intervals which you have testified to, what do you say as to whether in your opinion it would be possible for a geologist, no matter how much care was spent in the examination, if these developments still existed, to identify a fault fissure found in the Daly and Ontario with the Crescent fissure found here in the property in controversy?

A. I will say that the identification could not be made with any degree of satisfaction or positiveness.

It would be, in my judgment, a mere matter of speculation.

Q. Can you tell me the distance that Mr. Wilson testified that he measured up from the center of the K. K. incline and thirty six feet on the dip as it went up following the ore, and indicate upon the map U. U. where that would fall?

A. The map UU was prepared under my direction during the noon recess yesterday, and the map correctly shows where that point would fall as in the projection the working shown as a new drift at an angle to the line of section. The line of section cut there the northerly side of the Columbia raise, and the end of the new work is shown as projected west seventeen feet, and the point Mr. Wilson testified that he found in the foot wall of the Crescent fissure is projected fourteen feet, and was projected, however, approximately parallel to the stratification, and in that way did not distort their positions.

I would indicate as the point on Exhibit UU taking his testimony as to where he encountered the fissure, at a point enclosed in a doubling. This point above the top of the K.K. Level No. 1, measuring on the slant of the vein, is $47\frac{1}{2}$ feet. Mr. Boehmer's Exhibit 10 shows a scale of thirty feet to the inch. So that, taking that scale and measuring on Exhibit 10 the $47\frac{1}{2}$ feet to the top of the K.K. Level No. 1, would bring it to the point—

Mr. Dickson: Is there any objection to marking that?

Mr. Critchlow: No.

(Witness marks on map.)

Witness: Which I mark in pencil as a dot enclosed in a circle, and on a scale of thirty feet to the inch, according to Mr. Boehmer's sketch, that point from the hanging wall of the vein as represented on this Exhibit is twenty feet. That point (the dot indicated) from the hanging wall of the vein as represented upon Mr. Boehmer's Exhibit 10, and considering the [arrow] shown as meaning the vein itself, is five feet. That would bring one, according to this sketch, to the hanging wall of the vein at that point. The distance across the vein from where the hanging wall is there represented by Mr. Boehmer and where according to Mr. Wilson's testimony the foot wall is, on the horizontal measurement, is thirty feet, at right angles; and taking a point down on the K.K. Level as the point which is supposed to be also the foot wall of the fissure, it would be seventeen and one half feet.

The small sketch enclosed in red in the upper left hand corner of Exhibit UU is traced from Exhibit AA, that is the workings are traced from Exhibit AA, and the red line is shown here as the line of section. It is coincident with the easterly side of the Columbia raise, and it was intended to be placed in a position approximating that shown on plaintiff's Exhibit No. 11. The projections are at right angles, [orographic] projections, and on that projection the things will seem to be approximately parallel to the strike of the fissure as shown in the K.K. Level No. 1. The assumption I make in carrying up my line of raise, is that Exhibit A and Exhibit DD and all the rest of Mr. Brooks' maps are correct, and that that is so with reference to the K.K. Level and the working shown as a drift at station 2748. I make no other assumption than the assumption of work out in this section at the K.K. incline, a station which is marked on this 677-a and which on the map is 67-a, an error having

been made in marking the station, a station which is placed 252 on Exhibit A by the survey of Mr. Brooks, as shown on Exhibit A. The K.K. incline is shown in section, actual section. It is shown in the projection at a point where the new work a little higher up the incline leaves the side of the incline, and based upon notes taken by myself which I have as to the direction and dip of that incline.

Here is a loose leaf book. That is all that refers to this matter. They are not written with the courses running up or down the K.K. incline. There is no course there up or down the K.K. incline, but that is new work, that runs up, if that is what you wish. This note taken the [the] 3rd inst., I stood in the K.K. incline and took the course up the new work towards the Crescent fissure. It does not run south 42 west. I made an error in putting it southwest instead of southeast. It should be south 42 degrees east. I don't see 667-a on this map, Exhibit A. My measurements there and elevations would be gotten from my measurements etc., from some station that is not shown on the map, which is now shown in the small red block in the upper left hand corner of Exhibit UU, but it is not connected on the map so that anybody looking at Exhibit A can determine its position or whether I have got it on correctly at its proper position, and I am not able to find it on Exhibit A, but I can locate it approximately where it should be—

Mr. Critchlow: You may go there and [so] on.

Witness: By tracing over the workings. I have criticism of the representation made on plaintiff's Exhibit 11, but none to make as to what is represented as the drift from the end of the K.K. Level. I also have some criticism to find with the beginning of the K. K. Level with reference to what the plaintiff's witnesses have called the Crescent fissure. I am willing that they should take the responsibility of calling what they call the Crescent fissure. The general position of Level No. 1 with reference to the raise is in general correctly shown there. It shows the raise going up above what the plaintiff's witnesses call the Crescent fissure going into the hanging wall. My engineer does not show it that way.

Looking at Level No. 1 the raise there indicated on Exhibit DD tending towards the hanging wall of what I call the Crescent vein without reference to what the plaintiff's witnesses have said about it also runs up to it and follows along it. The direction given by Mr. Boehmer in his picture and sketch here that the raise is trending to get above what he calls the Crescent fissure is exactly what is indicated by the picture Exhibit 11, but we continue it up to the

253 Hanauer level, and it is shown that the Columbia raise is in the hanging wall of the fissure. So that there is no difference in that except if you continue the Columbia raise as shown on Exhibit 11 and continue the porphyry or the vein as a fault fissure as you call it on Exhibit 11, they will—the vein will pass out of the roof. That is shown on Exhibit DD. The inconsistency between the sketch which I have made as Exhibit UU to represent the finding of the facts in the ground as Mr. Wilson testified to, and the Exhibit 11 which is a sketch made on a scale of two feet to the inch by Mr. Boehmer, is this: The Columbia raise is all, at least in part, from the K. K. Level No. 1 and Hanauer Level in the fissure, and Mr. Wilson says the point marked projected west fourteen feet into the foot wall of the fissure, and that would show a width of the fissure of over twenty feet. My principal objection to Exhibit 11 is that there is no other fissure or slip or foot wall of the main fissure shown on the section 11, the implication by the picture being that everything from the drift is shown as a square on the left of the picture, that everything to the right of that is country rock—bent strata. I know that the drift shown on Exhibit 5 and running from station 669 to station 2847 is on the foot wall of the fissure. I ran a cross cut across from station 2847 which is shown in Exhibit 11. That distance is something approximately thirty feet, and I had the ore taken out of that and put into the extension of the drift as shown on Exhibit 5 which is shown on Exhibit A. I filed ten sets of that drift with the ore that I took from the cross cut that I drove across from the foot to the hanging of the fissure. The ore that was within five feet of where I started at station 2847 extended from the top to the bottom of the drift, and it does not, as indicated upon plaintiff's Exhibit 11, run out and disappear above the cross cut. There is some ore that does go; there is a face of ore practically from the top to the bottom of that cross cut. Mr. Boehmer in his sketch No. 11 does not make the ore clear enough, but shows this as secondary rock when it is vein filling. In my examination in chief I said everything was vein filling that is represented in pink upon the Exhibit. So that we come back again to the old question when I was upon the stand before, as to what is vein and what not, and that is a part of the criticism I make of Mr. Boehmer's sketch. In my testimony with respect to the speculations or upon the identity of the Crescent fissure, with the dislocation fissure, so-called, in the Ontario workings, and permit a certain amount of mineralization from an assumed regularity of the beds and from an assumed regularity of a strong pronounced and profound fissure. I know of a fissure called by Mr. Palmer "dislocating" fissure, of the Ontario in there, that dislocates the vein about 60 feet, and I know of a cross cut working

254 running north from No. 2 Daly shaft and which, if a dislocating fissure has anything of the strike and dip of the Crescent fissure, would be cut by the cross cut, and that was the last place that there is a long cross cut to the north until we come to the Anchor tunnel which is a part of the Crescent tunnel. I admit that an engineer who had seen workings going up under his administration and studied geology of that particular mine from the very first, would be in a better position to identify fissures than a casual observer. So I have no criticism to make of Mr. Palmer's identification of the dislocating fissure as extending out in the working.

As you go north in this cross cut you will come close to the mouth of the Anchor tunnel and if you measure the distance on the strike of the Crescent fissure and the fissures north of the Crescent fissure, the distance between that cross cut and where it would intersect the Anchor tunnel would be two thousand feet. I don't know how far it is from the point where the dislocating fissure is intersected in the Anchor tunnel, to the place where it may last be seen in the Daly workings. It is not two thousand feet or anywhere near it. What I said was the Crescent fissure in my judgment would be struck two thousand feet away from where seen in the Daly, and I don't know whether the dislocating fissure is seen much closer than in the Anchor tunnel, and I would not deny that it is.

Q. Now the question is then, if that is a tracing of the dislocating fissure up in the Anchor tunnel, then it would reduce the distance between the assumed ends of the same fissure, as Mr. Boehmer says, to much less than two thousand feet, would it not?

A. No, because the mouth of the Anchor tunnel and the Alliance tunnel are very close together and they do not run in the same direction, but so far the last series of questions has nothing to do with the Alliance tunnel. We have been speaking about the showing in the Daly cross cut and in the Anchor tunnel. Now, if you wish to say that it reduces the distance between the Anchor tunnel and Daly cross cut, yes, I will agree with you, but if you want to go to the Alliance tunnel, I will have to ask you to explain your question.

I assume, and also say that the Crescent fissure is seen in the Alliance tunnel, and know that it is at the Elephant stope, and where else in the Alliance tunnel I don't know where it is seen, if at all. I neither admit nor deny that it is anywhere else visible in any of the workings found in the Alliance tunnel, or in any working from it. I don't know. I won't assume even for the purpose of attempting to establish or speculate upon the question of the identity of the dislocating fissure with the Crescent. It, on the east end and the Elephant stope on the west, is entirely an undeveloped
255 country between the workings of the Daly, except by the Anchor tunnel, so far as I am acquainted with it. I don't know where it is in the Anchor tunnel.

Q. You won't even assume the development in the Hanauer tunnel for two thousand feet would have any bearing upon it, or help

you out as to the development in the Alliance, or helps you to trace the vein?

A. While I have had a doubt raised in my mind, of course I have considered the Hanauer tunnel in trying to form an opinion as to whether the Crescent fissure is followed in the Alliance tunnel before it reaches the Elephant stope, but I am not able to definitely conclude that it is so followed, any more than the other witnesses seem to have been able to speak, that have been upon the stand.

Q. I understand you to say that they are fault fissures, purely fault fissures as distinguished from mineralizing fissures or veins in this territory, say between the Elephant stope and the ground to the east of the Aetna?

A. Well, I have not made any distinction between fault fissures, barren fault fissures and the fissures which carry ore, because nearly all the fissures can be found with ore in them through this country, but some of them have not been mined to any great extent. I have never tried to recognize fault fissures in that country as separate from mineralizing fissures; but I do not recognize any such fissures at all.

As to the McGregor fissure, I have mined considerable ore out of it. I know it is a mineralized fissure; there is no speculation about it in my mind. I do not pretend to say there are not fault fissures in that ground, other than the Crescent fault fissure, which are fault fissures pure and simple, in which the ore has not any mineralizing solutions in it; but if they are there I know nothing about it; [*but if they are there I know nothing about it,*] and have formed no opinion on that subject.

Mr. Critchlow: In view of the request made on Mr. Wilson yesterday to make a section showing the conditions he found running up in that work in the K. K. incline, and in view of the examination which was suspended by Mr. Dickson, I think it is only fair that the sketch which he did make should be put in.

Mr. Dickson: What I requested him to do was to make a calculation of the distance, but I have no objection to it.

The Court: It will be received.

256 Redirect examination:

Q. I understand, Mr. Blood, in the face of the K. K. Level No. 1 as shown on Exhibit 11 and sketched on that Exhibit, is in ore from top to bottom?

A. As you point there it is really in the face of the level, because that cross cut was started from the foot wall to strike it about the place you put your pointer.

Taking this scale of two feet to the inch at the distance out from the level as represented on that sketch, there is ore from top to bottom, on the side of the drift in the K. K. Level No. 1, shown on Exhibit 11. It is on the westerly side, and is in the fissure as I have defined it. Its position with relation to the dip of the fissure is not fully developed. It appears, however, to be rather flat in there.

Mr. Dickson: That is all of our testimony.

Mr. Critchlow: I would like to call Mr. Wilson just as to why he could not give the calculations that were called for.

WILLIAM A. WILSON, further testified:

Direct examination:

I was asked yesterday to make a calculation and was in part examined by Mr. Dickson about it, but I was not able to make the calculations from the data supplied by Mr. Blood or Mr. Brooks, because their course was 90 degrees off and they had the wrong station on the map, so in order to answer the question I constructed a section showing the situation; but I made the calculation by constructing a section and ascertained that the point I had given by measurement near the stope in the K. K. incline coincided with the foot wall as shown on the sketch of the country by Mr. Boehmer.

Sketch marked Exhibit 23, shows the section of the geology of the country and the point where I put the head of the raise from the K. K. incline on the ore, and agrees with the foot wall as outlined by Mr. Boehmer in his sketch, and as continuing up to that point.

(Approval of Statement of Evidence, etc., by District Judge.)

The foregoing hereby approved as a statement of the evidence so far as the same is essential to the decision of the questions presented by the appeal, and the same together with the exhibits referred to therein are hereby made a part of the record herein, pursuant to the provisions of Equity Rule 75 b.

J. A. MARSHALL,
Judge.

Dated April 21, 1913.

Filed April 21, 1913.

JERROLD R. LETCHER,
Clerk.

(Opinion of the District Court.)

MARSHALL, J.:

The plaintiff is the owner of an undivided three-fourths of the Arthur and Conkling mining claims: the defendant owns the remaining one-fourth. The object of this suit is to determine an adverse claim of the defendant to a strip of land one hundred and thirty-five and five-tenths (135.5) feet in width of the southwest end of the Conkling claim, as the plaintiff alleges, and to obtain an accounting of ores mined from beneath the surface of this claim by the defendant and its predecessor in title, whose liability it has assumed. [Theses] ores came chiefly, but not entirely, from beneath the strip of land in controversy. The defendant claims title to the contested

strip under the ownership of the U. J. Wenner, the Custer No. 2 and Silver Hill No. 4 mining claims, and to the ores in question under the ownership of a vein apexing in the Monroe Doctrine Cumberland and Constitution mining claims and extending on its dip beneath the ground claimed by plaintiff. All of the claims heretofore named are patented but the Conkling patent is prior in time to the claims under which defendant asserts title to the 135.5 [feet] strip; and if this strip be in fact included in the Conkling patent, the plaintiff is the owner of an undivided three-fourths thereof.

So far as it is material to the disputed strip in controversy, the description in the Conkling patent is this: It is recited that the patentee did enter and pay for that certain mining claim designated by the Surveyor General as lot No. 689, and bounded, described and platted as follows: * * * Thence second course south 60 degrees and 45 minutes west 1,500 feet to corner No. 3; thence third course south 21 degrees 9 minutes east 600 feet to corner No. 4; thence fourth course north 60 degrees 45 minutes east 1,500 feet to corner No. 1, the place of beginning, said lot No. 689 extending 1,500 feet in length along said Conkling vein. The grant is of the mining premises before described, together with all that portion of the

Conkling vein and of all other veins throughout their entire
258 depth the tops [of] apexes of which lie inside of the surface
boundary lines of said granted premises in said lot No. 689.

It is also provided that the right of possession to said outside parts of said vein shall be confined to such portions thereof as lie between vertical planes drawn downward through the end lines of said lot No. 689 and so continued in their own direction that such planes will intersect such exterior parts of said vein. If the calls of courses and distances found in this description are followed, the strip is included in the Conkling patent. The defendant, however, contends that this claim was officially surveyed for patent under the direction of the Surveyor General, and that as so surveyed posts were placed upon the ground marking the southwest end-line of the claim; and that, giving effect to the monuments and shortening the distances and to conform therewith, the strip was excluded and was subsequently patented as a part of the claims owned by it. This contention is supported by the official field notes of the survey and evidence as to the existence and position of the monuments; but, it is urged by the plaintiff that such evidence is inadmissible because, it is said, that the description in the patent is free from ambiguity and no ambiguity arises in applying this description to the ground patented; hence, an ambiguity cannot be imported into this description by parol evidence. There would be force in this [is] if the premises were correct. It is true that the description in the patent fails to call for monuments or posts at corners 3 and 4. The call for a corner is but a call for an abrupt change of direction, but the patent purports to convey lot No. 689 as designated by the Surveyor General, and the description by metes and bounds is but an attempt to properly describe this lot. Now, if in applying this description to the ground, it be found that there is a conflict between the position of the lot as so designated and the ground included, by giving effect to

the call for distances the ambiguity at once arises, and it arises not by importing into the patent what is not called for but from the mere ascertainment of the meaning of the patent calls. In view of this conflict which call is to prevail? The survey and official marking of the lot is preliminary to the application for patent. The notice given to adverse claimants is of a claim to the ground so marked. The intent to convey by patent that ground and only that ground is apparent. This is the ordinary rule where land is described by an official lot number and by metes and bounds varying therefrom.

Rutherford vs. Tracy, 48 Mo. 325; see also

Lodge vs. Lee, 6 Cranch 237.

259 Keith vs. Reynolds, 3 Greenleaf, 339.

The objection to the consideration of the evidence offered by the defendant to prove the position on the ground of lot No. 689, as designated by the Surveyor General will be overruled; and the issue as to the one hundred and thirty-five and five-tenths (135.5) [feet] strip will be found for the defendant.

It is not disputed that a fissure called the "Crescent fissure" apexes in the Monroe Doctrine, Cumberland and Constitution mining claims, owned by the defendant, which fissure, on its strike, crosses the parallel side lines of those claims, nor that this fissure on its dip passes beneath the Conkling mining claim in the immediate vicinity of the ore body in dispute and between vertical planes drawn through the parallel side lines of defendant's claims and continued in their own direction. So that the segment of the fissure beneath the Conkling is the exclusive property of the defendant, if it has any extralateral right thereto, in view of the fact that the fissure crosses both side lines. If I have correctly understood the admission made in the course of the argument, it also is not disputed that the Crescent fissure is a mineral vein, the subject of location and [patnet], under the mining Act of May 10, 1872. But the position of the plaintiff is that the ore body as to which an accounting is sought is a distinct bedded deposit and no part of this fissure; that neither genetically nor by position is it so connected with the fissure as to pass as a part of it. Further, that the defendant has no extralateral right to a fissure vein crossing both side lines.

These contentions are deserving of serious consideration, and any conclusion reached cannot be claimed as free from all doubt. The Crescent fissure has been developed on its strike for many thousands of feet and on various horizons. This fissure shows evidence of two distinct periods of fissuring: the first resulted in a filling of the fissure with porphyry; the second reopened the old fissure constituting, as it did, a plane of weakness, fractured, ground-up, and in places seems to have removed the porphyry, and was then followed by the circulating waters that originated the vein. The country rock within the limits embraced in the controversy is limestone, striking approximately east and west and dipping about 20 degrees to the north. The fissure strikes north 60 degrees east and south 60 degrees west, and dips to the southeast at an angle of about 53

degrees. On the foot-wall side of the fissure at many different horizons ore-bodies are found in the foot-wall lime, lying with the stratification of the lime but fading out within a short distance away from the fissure. These bodies have not been found on the hanging-wall side of the fissure. The ore-body in controversy is one of these bodies. Where porphyry is still existent it is almost invariably the hanging wall portion of [th-] fissure vein. The fissure itself is but feebly mineralized in comparison with the bedded off-stots, but in places ore is found in considerable quantity in the fissure and then in a continuous body makes off into the lime. The greatest distance a bedded deposit is shown existing away from the fissure is in the ore-body in dispute, and there it has been stoped for about one hundred and fifty feet, measured along the lime bed. Its extremity there is about one hundred and ten feet in a direct line from the foot-wall of the fissure. The ore in the beds and that in the fissure is similar in composition, and I see no reason to believe then genetically distinct. The fact that the fissure is not uniformly mineralized, and that the larger and more valuable ore-bodies have been found in the beds, is not entitled to great weight. It is just what would be expected in the case of a large fissure, even if this fissure be the only channel through which the mineralizing solutions came from the deep. In Spurr's "Geology Applied to Mining," page 171, it is said:

"Frequently the rock on both sides of the fault-zone is thoroughly wrenched and seamed with tiny cracks, even where it appears solid to the naked eye. The mineral solutions are more effective among slight fractures than in a large fissure; thoroughly seamed rock is a very favorable place for ore, because the solutions are checked and held in a way that seems fitted for the working of the reactions which lead to the precipitation of ores. If the mineralization is slight along the main fault fracture it may be considerable along some of the auxiliary fractures, and in the strained rock near by. This is especially the case in limestones, where great deposits thus originate. Therefore the search for mineralization along a fault plane, in districts where the two are associated, should extend over a comparatively wide zone."

A good illustration of this condition is found in the cross-section of the Bushwhacker-Park Regent mine of Aspen, Colorado, found in this work at page 170.

Are the bedded ore-bodies separate and distinct veins or must they be considered as mere enlargements of the fissure vein? This question naturally depends on the definition of a fissure vein. Is that vein to be considered as sharply defined by the walls of the fissure or does it also include such enlargements as are due to a local infiltration in strained or fractured wall-rock? If these enlargements are not to be considered a part of the fissure vein, it is difficult to classify them or to bring them under the general theory of the mining Act. Individually they are of trifling extent and the only connection between any two of them is the

fissure. Professor Heinrich Ries, in his *Economic Geology of the United States*, 236, as quoted in *Costigan's Mining Law*, 122, says:

"A fissure vein may be defined as a tabular mineral mass occupying or closely associated with a fracture or set of fractures in the inclosing rock, and formed either by filling of the fissure as well as pores in the wall rock, or by replacement of the latter (metasomatism). When the vein is simply the result of fissure filling, the ore and gangue minerals are often deposited in successive layers on the walls of the fissure; the width of the vein depending on the width of the fissure and the boundaries of the ore mass being sharp. In most cases, however, the ore-bearing solutions have entered the wall rock and either filled its pores or replaced it to some extent, thus giving the vein an indefinite boundary. Therefore the width of the fissure does not necessarily stand in any direct relation to the width of the vein."

While this is a geological definition of a fissure vein as distinguished from a miner's definition, it is apt and not in conflict with the latter. Under this definition the bedded deposits must be considered parts of the vein. The fact that these enlargements follow the [bedding] planes of the lime result from these planes of stratification being planes of weakness and more readily permeable than the rock is elsewhere. In the case at bar the mineralization is, of course, not confined to a bedding plane or any number of bedding planes, but the lime is mineralized or replaced generally along and in conformity to the direction of those planes. The fact that these enlargements are not found in the hanging country is interesting, but the cause is purely speculative. There is no evidence of any extensive faulting or throw. In places the porphyry doubtless furnished a barrier to the permeating waters, elsewhere it may be that the relation of direction of the fissuring stress to the direction locally taken by the fissure along the plane of least resistance was such as to especially strain and render permeable the foot-wall country. Whatever may have been the cause, we can simply deal with the result. The fact that each of these bedded deposits has been discovered by exploring the fissure, and not otherwise, and that once ignore the fissure and there is no other index to the inexistence, is strong evidence of their essential unity with the fissure. I think the deposit in dispute is a part of the Crescent fissure vein.

262 This vein crosses the located side-lines of the defendant's claim. Does the ownership of the apex give any extralateral right? In the case of *Keeley vs. Ophir Hill Consolidate Mining Co.*, I gave the reasons impelling me to conclude that where the vein in question is the discovery vein the side lines crossed by the vein becoming end-lines and that an extralateral right exists. Notwithstanding the argument for the plaintiff here, I have not changed my opinion. There are some new suggestions, however, requiring notice.

It is said that there is a presumption that the discovery vein of each of these claims courses along the length of the claim, and that

the Land Office has so adjudged when the claims were patented. The Land Department of the Government does not determine the strike of the vein. As said by Judge Hawley in Consolidated Wyoming G. M. Co. vs. Champion Mining Co. 63 Fed. 540, 552, "The Court cannot presume that the Land Office determined the course of the lode. The marking of an ideal line across the survey and diagram did not have the effect of putting a lode into the ground if there was no vein there. The respondent has a right to show what the facts are." It is true that such a presumption does arise against the locator and those in privity with him but this presumption is disputable, and only casts the burden of proof on those disputing it; and, in this case I think that burden has been sustained.

The estoppel is next urged. It is said that the mining Act restricts the locator to three hundred feet on each side of [of] the center of his vein; that by locating across instead of along the vein, in this case, the locator has obtained [a-] aggregate of fifteen hundred feet instead of six hundred feet, and by so doing might embrace many secondary veins. The United States has seen fit to grant the patents. The area embraced in any patent did not exceed the jurisdiction to grant conferred by statute. If there was a mistake or misrepresentation the patent was not void and cannot be collaterally attacked. I do not see that the plaintiff is in any position to urge an estoppel. The locator of the Conkling presumably wished to obtain title to a vein apexing therein. As to other veins passing over their dip at great depth beneath the surface of the Conkling he knew that he would take subject to the right of the locator of the apex. It is evident that he was in no way influenced by the shape of the defendant's locations. If the locator of the defendant's claims innocently mistook the direction of this vein the only loss proper to be imposed upon him is the disappointment of his anticipation as to the extent of apex he was acquiring. He in no way wronged subsequent locators.

263

There will be a finding and a decree for the defendant.
Dated at Salt Lake City, Utah, this 15th day of July, 1912.

Filed July 15, 1912.

JERROLD R. LETCHER,

Clerk.

(Decree. [])

This cause came on to be heard on the 9th day of February 1912, and was argued by counsel for the respective parties, and was thereupon taken under advisement. Said cause having been submitted upon the pleadings in the case and the evidence introduced by the plaintiff, Conkling Mining Company, and the evidence introduced by the defendant, the Silver King Coalition Mines Company, and the court now being fully advised in the premises, find all of the issues herein in favor of the defendant.

It Is Therefore Ordered, Adjudged and Decreed that the plaintiff take nothing by its complaint herein, and that the action be dismissed, and that the defendant, the Silver King Coalition Mines Company, do have and recover of the plaintiff its costs taxed at \$273.95, for which amount judgment is hereby rendered and entered herein in favor of said Silver King Coalition Mines Company, defendant, and against said plaintiff, and that execution issue therefor.

J. A. MARSHALL,

Judge.

Dated Aug. 5, 1912.

Filed August 5, 1912.

JERROLD R. LETCHER,

Clerk.

Petition for Appeal.

The Complainant herein, Conkling Mining Company, conceiving itself aggrieved by the order and decree made and entitled in the above entitled cause on the 5th day of August, A. D. 1912, wherein and whereby it was ordered and adjudged that the complainant herein take nothing by its said suit and that the same be dismissed and that the defendant do have and recover of and from the complainant its costs in the sum of \$270.95, now comes E. B. Critchlow, one of its solicitors and petitions the said Court for an order allowing the said complainant to prosecute an appeal from said decree to the Honorable United States Circuit Court of Appeals for the Eighth Circuit; and also prays that an order be made fixing the amount of security which complainant shall give and furnish upon such appeal, and that upon the giving of such security all further proceedings in this Court be suspended and stayed until the termination of said appeal by said United States Circuit Court of Appeals for the Eighth Circuit, and your petitioner will ever pray.

E. B. CRITCHLOW,

W. J. BARRETTE,

WILLIAM H. KING,

Solicitors for Complainant.

W. D. McHUGH,

Of Counsel.

Filed Janv. 13, 1913.

JERROLD R. LETCHER,

Clerk.

Assignment of Errors.

Comes now the Complainant, Conkling Mining Company, and files the following Assignment of Errors upon which it will rely upon the prosecution of its appeal from the decree made by this

Honorable Court on the 5th day of August, 1912, in the above entitled cause:

1. The said Court erred in admitting evidence for the purpose of impeaching, varying and qualifying the terms of the grant of the United States to the Boss Mining Company of the Conkling lode mining claim, U. S. Lot No. 689, marked Exhibit 1, in the testimony in this cause. The evidence so erroneously admitted was the following, to-wit:

(a) The field notes of the survey of the Conkling Lode Mining Claim, U. S. Lot No. 689, (Exhibit O).

(b) The field notes of the surveys of the Nero Lode Mining Claim, (Exhibit L), Pirate King Lode Mining Claim, (Exhibit M), Hope Lode Mining Claim, (Exhibit N), Twentieth Century Lode Mining Claim, (Exhibit W), San Pedro Lode Mining Claim, (Exhibit X), and Silver Hill No. 4 and Custer No. 2 Lode Mining Claims (Exhibit Y), and Arctic Lode Mining Claim, (Exhibit Z).

(c) The testimony of witnesses C. P. Brooks, J. Fewson Smith, Walter H. Wiley and Robert Gorkinski, relating to the position of certain bearing trees supposed to mark Corners Nos. 3 and 4 of Conkling Lode Mining Claim.

(d) A block of wood taken from bearing tree, (Exhibit P) and photographs of trees (Exhibits, Q, R, and S).

(e) The patent of the Custer No. 2 and Silver Hill No. 4 Lode Mining Claims, (Exhibit T), and Deeds from Belmont Mining Company to Thomas Kearns, (Exhibit U) and Deed from Thomas Kearns to Silver King Coalition Mines Company (Exhibit V).

2. The said Court erred in holding and deciding that the strip of land 135.5 feet in width and approximately 600 feet in length Northerly and Southerly, being a part of the West end of the Conkling Lode Mining Claim, U. S. Lot No. 689, as the same is described in the United States patent issued to the Boss Mining Company, (Exhibit 1), is not a part of and included within the premises conveyed by the United States to said Grantee, the Boss Mining Company, by said patent, and in holding that the said patent is controlled as to the description of the premises by the corners of the plat or parcel of land as actually marked upon the ground.

3. That the said Court erred in holding and deciding that the parcel of land described in the patent of the United States to the Boss Mining Company, to wit, the Conkling Lode Mining Claim patent (Exhibit 1), is in any manner other or different from the parcel of land described in the field notes of survey certified by the United States Surveyor General of Utah, (Exhibit O).

4. The said Court erred in holding and deciding that the ore body in question in this suit, lying beneath the surface of the Conkling

Lode Mining Claim, U. S. Lot No. 689, as the same is described in the patent (Exhibit 1), and which ore body was designated at the trial as the Elephant Stope ore body, is within the limits of and a part of the Crescent fissure.

5. The Court erred in holding and deciding that the ore body in question (the Elephant Stope ore body), beneath the surface of the Conkling Lode Mining Claim, as the same is described in the United States patent (Exhibit 1), is included within and is a part of a vein or lode having its top or apex outside of the boundaries of the Conkling Lode Mining Claim.

6. The Court erred in holding and deciding that the Elephant Stope ore body in question herein is within the limits and is a part of a vein or lode having its apex within the exterior boundaries of the Monroe Doctrine, Cumberland and Constitution Lode Mining Claims.

7. The Court erred in holding and deciding that the situation or location of the top or apex of the Crescent fissure vein, so called, (of which the ores taken from the Elephant Stope were a part), is such with reference to the side lines and end lines of the Monroe Doctrine Lode Mining Claim, U. S. Lot No. 217, Cumberland Lode Mining Claim, U. S. Lot No. 216, and Constitution Lode Mining Claim, U. S. Lot No. 215, as to give to the defendant as the owner of said mining claims the ownership of the ores of the said Elephant Stope.

266 8. The Court erred in holding and deciding that the defendant was not required to account to plaintiff for the value of ores taken from the Elephant Stope beneath the surface of the Conkling Lode Mining Claim, U. S. Lot No. 689, because said ores were a part of the Crescent Fissure Vein, having its apex within the boundaries of said Constitution, Cumberland and Monroe Doctrine lode mining claims, although said vein upon its course is laid across the located side lines of each of said mining claims, and in its dip intersects and passes outside of the planes of the end lines of each of said claims; in other words, the Court erred in holding and deciding that the plaintiff was not required to account for the value of ores taken, for the reason that they were taken as a part of the Crescent Fissure Vein, and under extralateral rights pertaining to the said Monroe Doctrine, Cumberland and Constitution Lode Mining Claims, followed on the dip through the end line planes of said claims.

9. The said Court erred in refusing to require the defendant to account to the complainant for complainant's proper proportion of the value of all ores mined or extracted by plaintiff from within the surface boundaries of the Conkling Lode Mining Claim, as the same is described in the patent, (Exhibit 1), notwithstanding the supposed [defences] set up by the defendant herein.

Wherefore Complainant prays that the said Decree be reversed and that the District Court be instructed to proceed to enter such

decrees, interlocutory and final, as are prayed for by said Bill, or as the United States Circuit Court of Appeals may order.

E. B. CRITCHLOW,
Solicitor for Complainant.

Service of copy of the foregoing Assignment of Errors admitted this 13th day of January, 1913.

DICKSON, ELLIS, ELLIS &
SCHULDER,
Solicitors for Defendant.

Filed Jany. 13, 1913.
JERROLD R. LETCHER,
Clerk.

(Order Allowing Appeal, etc.)

On motion of E. B. Critchlow, one of the solicitors for the complainant,

It Is Ordered that an appeal to the United States Circuit Court of Appeals for the Eighth Circuit, from the final decree heretofore filed and entered herein, be, and the same is allowed and a certified transcript of the record, testimony, exhibits, stipulations and all proceedings herein, be forthwith transmitted to the said United States Circuit Court of Appeals.

It Is Further Ordered that the bond on appeal be fixed at the sum of \$1,000.00, the same to operate as a supersedeas and for costs and damages upon appeal.

Dated January 13, 1913.

J. A. MARSHALL,
Judge.

Filed Jany. 13, 1913.
JERROLD R. LETCHER,
Clerk.

Bond on Appeal.

Know All Men By These Presents that we, Conkling Mining Company as principal, and The Title Guaranty & Surety Company, as Surety, are held and firmly bound unto Silver King Coalition Mines Company in the full and just sum of One Thousand (\$1,000.00) Dollars to be paid to the said Silver King Coalition Mines Company, its successors or assigns, to which payment well and truly to be made we bind ourselves, our successors or assigns, jointly and severally by these presents.

Sealed with our seals and dated this 15th day of January in the year of our Lord one thousand nine hundred and thirteen.

Whereas lately at the April Term of the District Court of the United States, Eighth Circuit, in a suit depending in said Court between Conkling Mining Company, plaintiff and Silver King Coal-

tion Mines Company defendant, a decree was rendered against the said Conkling Mining Company, and the said Conkling Mining Company has obtained the allowance of an appeal by order of the said Court to reverse the said decree in the aforesaid suit, and a citation directed to the said Silver King Coalition Mines Company citing and admonishing it to be and appear in the United States Circuit Court of Appeals for the Eighth Circuit, at the [Cirt] of St. Louis, Missouri, sixty days from and after the date of the said citation.

Now the condition of the above obligation is such that if the said Conkling Mining Company shall prosecute said appeal to effect and answer all damages and costs if it fail to make good its plea, then the above obligation to be void, else to remain in full force and virtue.

[SEAL.]

CONKLING MINING COMPANY,

By G. A. LAND, *Secretary*.

[SEAL.]

THE TITLE GUARANTY & SURETY
COMPANY,By KARL A. SCHEID, *Agent*.

Approved this 15th day of January, 1913.

J. A. MARSHALL,

District Judge.

Copy served on us this 15th day of January, 1913.

DICKSON, ELLIS, ELLIS &
SCHULDER,*Solicitors for S. K. Coalition Mines Co.*

Filed Jany. 15, 1913.

JERROLD R. LETCHER, *

Clerk.(Order Enlarging Time to File Transcript in Appellate Court to
April 15, 1913.)

At this day, pursuant to stipulation filed herein, it is hereby Ordered by the undersigned Judge who signed the citation, that the time within which the Clerk of this Court is required to make return to the Circuit Court of Appeals of the Eighth Circuit, upon the Appeal herein, and within which it is required that the record be lodged in said appellate court be and the same is hereby extended to and including the 15th day of April, 1913.

J. A. MARSHALL,

Judge U. S. District Court.

Dated at Salt Lake this 11th day of March, 1913.

Filed and entered in Order Book March 11th, 1913.

JERROLD R. LETCHER,

Clerk.

(Order Enlarging Time to File Transcript in Appellate Court to May 15, 1913.)

At this day, pursuant to stipulation filed herein, it is hereby ordered by the undersigned Judge, who signed the Citation, that the time within which the Clerk of this Court is required to make return to the Circuit Court of Appeals of the Eighth Circuit, upon the Appeal herein, and within which it is required that the record be lodged in said appellate court, be and the same is hereby extended to and including the 15th day of May, 1913.

J. A. MARSHALL,
[Judge] U. S. District Court.

Dated at Salt Lake City this 12th day of April, 1913.

Filed April 12, 1913.

JERROLD R. LETCHER,
Clerk.

(Stipulation for Transmission of Original Exhibits to Appellate Court.)

It is Stipulated between the parties to the above entitled suit by their respective counsel that the clerk of this court shall forward with the transcript on appeal to the Circuit Court of Appeals to be used upon the appeal from the judgment made and entered herein the following exhibits, to-wit:

Exhibit	A—[Defendant's] Plan Map.
Exhibit	1—Patent Conkling Claim.
"	B—Defendant's map of claims.
"	C—Patent Pinyon and Pinyon Extension.
"	D— " Zephyr.
"	E— " Bass.
"	F— " Brave Columbia.
"	G— " Constitution.
"	H— " Cumberland.
"	I— " Monroe Doctrine.
"	J—Field notes Zephyr.
"	K— " " Brave Columbia.
"	L— " " Nero.
"	M— " " Pirate King.
"	N— " " Hope.
"	O— " " Conkling.
"	P—Block from Bearing Tree.
"	Q—Photo of Tree.
"	R— " "
"	S— " "
"	T—Patent Custer No. 2 and Silver Hill No. 4.
"	W—Field Notes 20th Century.

(Præcipe for Transcript.)

The Clerk of the above Court will prepare and forward to the United States Circuit Court of Appeals for the Eighth Circuit, a type-written transcript in the above entitled cause, and include therein the following:

1. (Second) Amended Bill of Complaint.
2. Answer to (Second) Amended Bill of Complaint.
3. Replication to Answer.
4. Stipulation in re time and manner of taking testimony.
5. Order as to time and manner of taking testimony.
- 271 6. Amended Answer.
7. Reply.
8. Narrative Statement of Testimony.
9. Proofs and Exhibits.
10. Opinion of Court.
11. Decree.
12. Petition for Appeal.
13. Assignment of Errors.
14. Order allowing Appeal and fixing Bond.
15. Bond on Appeal.
16. Stipulation as to original Exhibits.
17. *Præcipe*.
18. Citation.
19. Orders of Court extending time for filing transcript.

PIERCE, CRITCHLOW & BARRETTE &
WM. H. KING,

Solicitors for Appellant.

Copy received on this 21st day of April, 1913.

DICKSON, ELLIS, ELLIS &
SCHULDER,
[*Solicitor*-] for Respondent.

Filed April 21, 1913.

JERROLD R. LETCHER,

Clerk.

(Clerk's Certificate to Transcript.)

UNITED STATES OF AMERICA,
District of Utah, ss:

I, Jerrold R. Letcher, Clerk of the United States District Court for the District of Utah, do hereby certify that the foregoing pages numbered from 1 to 388, inclusive, are as full, true and complete a transcript of all the pleadings, proceedings and records now on file and of record in said office, in a certain cause heretofore adjudicated in said court, wherein Conkling Mining Company, a corporation is complainant and Silver King Coalition Mines Company, a corporation, is defendant, as it purports to contain, and made pursuant to the Præcipe filed therein by the Appellant.

272 I further certify that the original Citation and the original Exhibits specified and set out in the stipulation contained in said transcript, are hereto attached and herewith returned with the transcript of the record in said cause.

In testimony whereof, I affix my official signature and the seal of said Court, at Salt Lake City, in said district, this 7th day of May, A. D. 1913, and of the Independence of the United States of America the 137th year.

[Seal of the U. S. District Court, District of Utah.]

JERROLD R. LETCHER,
Clerk U. S. District Court for District of Utah.

Citation.

United States of America to Silver King Coalition Mines Company,
Greeting:

You are hereby cited and admonished to be and appear in the United States Circuit Court of Appeals for the Eighth Circuit, at the City of St. Louis, Missouri, sixty days from and after the day this Citation bears date, pursuant to an appeal allowed and filed in the Clerk's office of the United States District Court for the District of Utah, wherein Conkling Mining Company is Appellant and you are Appellee, to show cause, if any there be, why the Decree rendered against the said Appellant as in said Appeal mentioned, should not be corrected, and why speedy justice should not be done the parties in that behalf.

Witness the Honorable John A. Marshall, Judge of the United States District Court for the District of Utah, this 15th day of January, A. D. 1913.

J. A. MARSHALL,
*Judge of the United States District
Court, District of Utah.*

Service of the foregoing Citation is hereby accepted this 15th day of January, 1913.

DICKSON, ELLIS, ELLIS &
SCHULDER,

Solicitors for Silver King Coalition Mines Company.

Filed May 12, 1913.

JOHN D. JORDAN,
Clerk.

273

(SUPPLEMENTAL TRANSCRIPT.)

(Order of District Court as to Supplemental Transcript.)

In the United States District Court in and for the District of Utah.

No. 307. Equity.

■!■

CONKLING MINING COMPANY, a Corporation, Plaintiff,

vs.

SILVER KING COALITION MINES COMPANY, a Corporation, Defendant.

Order.

It appearing from the attached stipulation of the parties that the attached testimony of Max Boehmer, a witness called on behalf of the plaintiff, is a true statement of a portion of the testimony given by said witness upon cross-examination upon the trial of said case;

And it further appearing from said stipulation that the attached copy of United States Patent of the Conkling claim is a full, true and correct copy of the certified copy of the same [introduce-] [duced] in evidence upon the trial of said case;

And it further appearing from said stipulation that said testimony and said patent were inadvertently omitted from the statement of the evidence sent up for use on appeal in this case, and that both parties desire said testimony and said patent to be made a part of the record;

Now, upon consent of the parties, it is hereby Ordered that said testimony and said patent, accompanied by said stipulation and a copy of this order, be forwarded by the Clerk of this Court to the Clerk of the Court of Appeals.

Dated November 10th, 1913.

J. A. MARSHALL,
Judge.

Filed Nov. 10, 1913.

JERROLD R. LETCHER,
Clerk.

UNITED STATES OF AMERICA,
District of Utah, ss:

I, Jerrold R. Letcher, Clerk of the United States District Court, in and for the District of Utah, sitting at Salt Lake, do hereby certify the above and foregoing to be a true, perfect and
274 complete transcript and copy of an order in the [amending] transcript on Appeal etc., heretofore made and now of record in said Court, and in a certain cause No. 307 in Equity in said Court pending wherein Conkling Mining Company is complainant and Silver King Coalition Mines Co., is Defendant, as fully and completely as the same still remains of record in my office.

In testimony whereof, I have hereunto set my hand and affixed the seal of said court, at Salt Lake, in said District, this 10 day of Nov., A. D. 1913.

[Seal U. S. Dist. Court, Dist. of Utah.]

JERROLD R. LETCHER,
Clerk.

(Stipulation as to Supplemental Transcript, etc.)

In the United States District Court in and for the District of Utah.

CONKLING MINING COMPANY, a Corporation, Plaintiff,

vs.

SILVER KING COALITION MINES COMPANY, a Corporation, Defendant.

It is hereby stipulated that the following testimony of Max Boehmer, a witness for Plaintiff, given upon cross examination, was inadvertently omitted from Defendant's proposed amendments to the statement of the evidence made by the Plaintiff for use upon appeal.

And it is further stipulated that the said testimony of said witness may be deemed to have been included in Defendant's proposed amendments to plaintiff's statement of the evidence.

It is further stipulated that through inadvertence there was omitted from the description of the mining claim referred to on page 82 of the Transcript of the Record, certain figures, and that to make said record complete and intelligible, said figures so omitted should be inserted at said page:

It is therefore stipulated that said record be amended as follows: Add at the end of Line 3, on page 82, the following, "1,500 feet"; and add at the end of line 11, page 82, the following, "600 feet"; and add at the end of line 15 on page 82 the following, "1,500 feet."

It is further stipulated and agreed that a copy of the patent to the Conkling Mining Claim, the same having been offered
275 in evidence, and inadvertently omitted from the transcript of the record, be included in the transcript of the record.

And it is further stipulated that the said testimony of Max Boehmer may now be deemed and taken to be included in plaintiff's proposed statement of evidence in this case upon appeal; and that the aforesaid amendments to the transcript, on page 82 of the record, may be deemed to be included in the said record; and that a copy of the patent of said Conkling Mining Claim may be deemed to be included in the record; and that the above named court may make such order as of the date of the allowance of plaintiff's proposed statement of evidence for use on appeal in said cause, or at such other date as may be necessary and proper, to the effect that the aforesaid matters shall be deemed and taken to be part of the evidence for use upon appeal in this case; and that the same may be transmitted to the Circuit Court of Appeals to be attached to the record already filed.

Dated, —.

E. B. CRITCHLOW AND
WILLIAM H. KING,
Solicitors for Plaintiff.
W. H. DICKSON,
A. C. ELLIS,
RUSSELL SCHULDER AND
THOS. MARIONEUX,
Solicitors for Defendant.

MAX BOEHMER, a witness on behalf of Plaintiff, cross-examined by Mr. Dickson, testified as follows:

The first time I visited this country in connection with the properties in controversy was in October, 1910, when I was upon the ground four or five days. At that time I saw all of the underground workings within a radius of a half mile that were then opened—all that were accessible as shown upon these maps at that time. One day was occupied with the surface. I traveled all over the surface of the Brave Columbia, the Constitution, the Cumberland and the Monroe Doctrine and looked at the discovery holes. I went on the Conklin ground in that vicinity. That was my first visit to Park City. I was not there again until the 12th of January of this year, when I spent eleven or twelve days up there. That is the extent of my examination.

276 Referring to the porphyry dike: I said that it was intruded first, long before this fissure you speak of occurred. If we examine a district in full we can as a rule determine whether the veins were later than the porphyry or dike or vice versa. You must have a fissure, of course, before you can intrude porphyry in it. Here one followed the other very soon. As to whether learned and scientific gentlemen might arrive at different conclusions as to which was first, I think that is pretty well settled. Of necessity there must have been a fissure before the intrusion of the porphyry. The opening of the fissure permitted the porphyry to enter. It is my conclusion that in this Crescent fissure there is no ore at all except what has been dragged in or which has come there by infiltration or leaching down from the upper levels. There are a number of places where

it can be plainly seen that ore has been dragged into the fissure. It was more plainly to be seen in the K. K. level No. 1 shown on my Sectioned Exhibit 11—left hand section. This little square painted brown represents the end of the drift, which shows ore bodies in that particular relation and condition,—the rock in the yellow coloring is close to it. The ore bodies were in the square that represents the end of the section of the drift or in the beds. I found drag ore in the fissure in all places where the developments were made below the K. K. Level No. 1—there is ore that stands against the fissure. I don't know exactly what you mean when you speak about "within the fissure"—You mean surrounded by Clay?

Q. No, I mean within the limits of the fissure, its northerly and southerly limit, within the width of the fissure where have you found drag ore?

A. Why, I have seen it at all points where the developments were made along that Long raise. The beds were dragged with the ore into the fissure.

Q. Now, would you point us to some place where you saw drag ore in the fissure?

A. It depends on the limits of the fissure. I call the limits of the fissure mud. * * * I have found drag ore in the fissure at that particular drift that I am now pointing to, in Section 11, that is drag ore.

Q. That piece of red?

A. Yes sir. The evidence that it is drag ore is the bending and changing of the original position of all the ores there in that vicinity. It lies there, according to the representation, in exact accordance and in conformity with the plane or dip of the fissure. That it is drag ore is indicated by the bending stratification, the bending and the dip of the limestone beds and the change of dip in the ores.

277 It is broken together with the limestone—crumpled in a number of places. * * * Exhibit 11 does not merely show that the ore is stopped abruptly; it also shows a foot or two of ore lying nearly flat going to the head of the drift.

Q. All right, but so far as the abrupt termination of the ore, that is all it shows, isn't it?

A. Yes sir.

Q. There is nothing to show that that ore body in the bed extended on southerly, and that it had been cut off by the fissure, so that you could expect to find the other portion of that ore down where I put my pointer?

A. No * * * there is no ore in the hanging of the fissure.

What is shown in this exhibit to have been faulted, cut off abruptly by fault fissure, I would expect to take up on beyond the fault fissure some time. I think it is already found in the Daly-Judge a half mile away. I think the Daly-Judge has picked up these ore bodies southerly. It is not a matter of mere speculation as to whether the ore bodies shown here in the right hand sketch on Exhibit 11 ever extended beyond the end of it. If this ore body had been deposited where you find it today by solutions the channel of which was up

through what you call the fault fissure, you would have just such a picture as we have here, without any material difference under these conditions. I am in accord with the theory that ore is deposited from solutions coming from some deep seated source, and whether it be in the form of a deposit, whether bedded or otherwise, there must have been some avenue, whether discoverable or not, through which the solutions could have come—that is my judgment. If the waters had come up the fissure they might go into the limestone beds. Whether they did or not, we don't know, but there is a channel there formed by that fissure through which the ascending solutions could have come and mineralized the fissure where ever it is mineralized; that is, if the fissure existed when the mineral solutions came up, but there was no channel at that time to my knowledge; that fissure was not there before mineralization.

Q. We will assume, Mr. Boehmer, that the stope to which I now point on Exhibit CC is a stope in the limestone, the bed rock of the country, and that the ore in that stope connects without any interruption with the ore in the Crescent fissure, having ore, continuous ore in the fissure and making off without any interruption into the lime beds; that in addition to that we had, where I now point, a chute near the station going up between stations 408 and 529, marked "Chute," going from the 400 level up to the 300 level; that there you had a width of ore five or six feet, part of it shipping ore, a tenth of it, or such a matter, high grade ore, and the balance milling ore, all standing in what is called the Crescent fissure; that from raise No. 3 we had ore standing with the Crescent fissure, making in the Crescent fissure and extending therefrom for a short distance out into the lime bed, depositing and forming there an ore body conformable to the dip and strike of the lime beds, and coming along the level No. 2, you knew that this stope shown upon the map to be the Baskin stope extends for a distance of 200 feet or more along the strike of the Crescent fissure and making out into the beds for 100 or 125 feet from the fissure; and that that bedded ore body came back not only to a junction with the Crescent fissure, but all along that length where it was conformable to the strike of the fissure there was ore standing in the fissure, merchantable ore—

A. Yes sir.

Q. —and that then going above the level No. 1 in a stope, a new stope shown as No. 4 Chute, No. 4 Chute being in the stope on up to the Aetna Tunnel level, and then on up to the Stephenson stope, on up into Rich's stope, then up into a higher stope, and up to Mike's drift, and then continuous ore up to Pete's drift, and then from Pete's drift up to the level of the Simpson drift of the magnitude in length along the fissure as shown by the stope that is platted there, and that the ore, all of it, stood in the Crescent fissure, and that then going back easterly again we have the McGregor stope a little above the Aetna Tunnel level, and about twenty five feet—we have an ore body there shown at the McGregor stope; about twenty five feet beneath that is another stope, both the McGregor stope and the one beneath it

being in the beds and making out and connecting with the ore in the Crescent fissure; and that there is today ore in the Crescent fissure itself extending out from this into the bedded ore body without any break in any of these workings in the mine,—wouldn't you be inclined, if you knew those to be the facts, to change your opinion that this Crescent fissure was not a vein at all, and never was the source of the mineralization?

A. I think not, because the demonstration under ground that I have seen positively—I never examined those workings particularly—but your own sections show that very body of ore in the fissure is connected with the flat ore body, and that it is all drag ore.

Q. Now, I am asking you to assume that these stopes which I have called attention to, as displayed upon Exhibit C, are as I have stated; assume that; would you still be of the opinion that the Crescent fissure was not the source of the mineralization?

A. I would indeed.

279 Q. You would be of the opinion that it was not?

A. Certainly.

Q. You would think it had nothing to do with the deposition of the ore found in that fissure?

A. I would, decidedly * * *. The Crescent fissure is a persistent and very large fissure. * * *

Q. Have you found the fissure through which you think this ground was enriched?

A. I have seen twenty or thirty fissures which might have contributed to the deposition of the ores or might not * * *. I would not point my finger to any one fissure that brought the solutions into the beds * * * and deposited the ores that are now in the Crescent fissure. I think it would be absurd to look for one fissure which created all the ore in that place. I have been unable to identify the fissure which in my judgment accounts for the deposition of these ores. * * *. If I assume that this ore running from the Simpson drift as shown in the stope is continuous down to the No. 1 level; that that ore varies in thickness from $3\frac{1}{2}$ to 5 feet, and greatest thickness ten feet and that it stands in the fissure and is unbroken * * *. I would still say that it was not referable to the Crescent fissure * * * because I know that at the top of the hill there were large flat ore bodies which must have dropped into it, and possibly dropped that down there for a distance on the plane of the dip of probably five or six hundred feet, and left it standing there solid and unbroken. * * *. I would still say that it was not referable to the Crescent fissure. It is my judgment that the ore now found in this line of work from the Simpson drift, with its continuous stope down to No. 1 level is to be accounted for by the fact that it was dragged in there from a flat ore body which once extended out further West than the Buckey stope, and from other horizons which show in the sections. * * *. The Columbia raise up to the 400 level is in the fissure except for short intervals, and I have no doubt that the Crescent fissure does go up approximately along the line of the Columbia raise from the Alliance Tunnel to the 400

level, and I identify that fissure on up to the Constitution drift.

Q. Assume that there are bedded ore bodies lying Easterly of the plane B, as shown on Exhibit CC, and easterly as shown upon Exhibit DD, and to which I have called your attention and it is not necessary to go over all of that question again, assume that to be the fact, you would expect a continuation—not a continuation—you would expect other ore bodies westerly of anything displayed on this map and discovered, wouldn't you—bedded ore bodies?

A. Yes, I would, except for the interference of the fault fissures.

280 Q. You would expect there would be bedded ore bodies out there that had been faulted by the fault fissures?

A. Yes sir.

Q. Assume that they have all occurred as I have stated, East of the Plane B, viz: as being in contact with the Crescent fissure, making in continuous ore from the ore in the fissure out in the beds as far as it went, and believing, as you say you do believe, that other bedded ore bodies would be found out to the West and scattered along as they are to the East, or claimed to be, wouldn't you, as a miner, an expert in the search of those ore bodies which you believe to be lying in the beds to the West, follow precisely the system that has been followed by the workings of the Crescent mine in all the years past, and drive along that Crescent fissure which in the past had always brought you to them, and if not, how would you hunt for them?

A. I think these flat ore bodies in the Park City District would be more cheaply discovered by [diamond] drilling than by following the fault fissure.

Q. No one in the Park City District, so far as you know, in all the years that it has been worked, in the immense mineral resources that have been discovered by the work carried on in the Ontario, the Daly-West, the Daly-Judge, the Crescent, the Silver King, and perhaps others, have ever resorted to that method of finding them?

A. I don't know, but I would.

Q. You never heard of it?

A. Not to my knowledge, no. * * *

Q. Then as to the bedded ore bodies that you would expect out here to the West, many hundreds of feet beneath the surface, and within comparatively narrow boundaries, and separated by long intervals of barren country rock, you think the way to prospect to find those ore bodies that you believe lie to the West of anything shown on this map, would be through the use of a diamond drill, instead of driving along on the Crescent fissure, which in the past has discovered all that have been discovered?

A. It would have been much cheaper.

Q. How would you know where to start your diamond drill in order to cut or pierce one of these comparatively small bedded ore bodies lying one thousand feet beneath the surface?

A. They are not small, for one thing—they are on your own maps 1,000 feet long.

Q. I am speaking of the bedded ore body?

A. Yes sir.

Q. They are separate, as shown on the map. Take the Elephant
stope itself, it lies in comparatively narrow bodies, less
281 than 200 feet—having flat ore bodies and expecting that there
were flat ore bodies of dimensions, we will say, as great as that
of the Baskin stope or Elephant stope lying to the West of anything
that has been developed, what would guide you in selecting a place
to start your diamond drill down to find one of those 1,000 feet
beneath the surface?

A. A study of the geological strata which contain those ores at
certain mines, and correlating them with other places, and hunting
with with a diamond drill it would be *must* cheaper than a tunnel
a mile long.

Q. Notwithstanding the result of the development work that
has been done in the past twenty-five or thirty years, you think
that would not be a judicious or proper method to pursue to find
other of these flat bodies of ore to the West, do you?

A. It would help some if it could be done cheaply with a long
drift, because the drag in the ore would lead a man to the ore bodies
above from which they were dragged. * * *

My statement was that there has been a [tremendous] throw,
how much I do not know, but I think a [tremendous] fault there.
* * * I have no evidence and could find no evidence of striation
lines on the walls to tell whether there has been a horizontal throw
or not. I could not determine that, but I am satisfied that it must
have a downward throw to either one side or the other.

Sections 9 and 10, or rather the several sections shown on Ex-
hibit 9 were made by me and under my direction. I examined
them closely to see whether they carried out the information which
I had obtained from the observable facts. I have shown the beds
on exhibit 9, but the marks on these sections are conventional in
most places. As I say, I did not see the dip of the beds in most
instances but I painted them in just to make the showing of lime-
stone. I am responsible for the beds being given the dip they
are given in the second picture there and those on exhibit 9 in the
vicinity of the Apex tunnel. I gave them that dip there because
I did not want to spend the time to figure it out exactly.

Going to the Elephant stope, I was unable there to discover the
fissure to which the ore there found is referable. I found a number
of fissures, but I would not refer to one of them as the source of
the ore. I have stated in my direct examination that it is not in-
frequent where you have a large fissure, especially where there
would be a bending in the fissure, that you would have branches
making out from it. That would not be unusual at all for branches
to make off from a fissure vein. Where the fissures cut through
the country, supposing there is a force that bends the fissure,
282 it would not be anything unusual to have splinters of min-
eral fissures making off into it—that would occur.

The ore in the Elephant stope makes back to the Crescent fissure.

I don't know whether there is any ore in the fissure there or not. I was not able to discover it further because of the lagging or the timber. I did not ask to have the lagging or timber removed to see whether the ore made there in the fissure or not—I did not think it important.

Q. Now these sections which are shown upon Exhibit FF are said to have been taken through these lines. You can see how close they are—what distance they are from each other?

A. Yes sir.

Q. Suppose you had where Section C or Line C goes through, an occurrence of ore such as is here shown, this part from the Kass cross cut up to and above 5444, we will say, was in the fissure, and there is ore in the fissure going on above, with ore in the beds at E and going out North, and going to Section D on the Exhibit we have an occurrence of ore again such as is shown here, going in the fissure for I should say about 100 feet above the Kearns cross cut, and then making off in continuous ore to the edge of the beds, the distance there shown, and then ore in the fissure again between Level No. 1 and the Aetna West drift, as represented there, and then coming to Section E you find ore making out from the beds or making out from the fissure into the beds, and about Level No. 1 up to the Aetna we have ore standing in the fissure again, as there shown, and at Line H we have ore in the fissure from Level No. 1 up to KK No. 3, and we will suppose the fissure mentioned is the Crescent fissure in all instances, would you, if you knew this picture to be a true representation of the facts, would you still say in your opinion none of that ore was referable to the Crescent fissure?

A. I would say so, but I think I had rather go and examine these points myself before I could have a decided opinion about it.

Q. I understand you then to say that if you knew nothing except what is shown upon these four sections to which I have called your attention, and that they truthfully represented the occurrence of ore in the fissure, and its relation to the ore as it lay in the beds, you knew nothing more, you would still give it as your opinion that none of this ore was referable to solutions coming through the Crescent fissure?

Mr. Critchlow: I think, Mr. Dickson, the witness is entitled to know whether you exclude all his other knowledge of the Crescent fissure.

283 Q. No, I do not, taking all the knowledge you have?

A. No. The actual knowledge of the facts as I have it, bear out no description or hypothetical description that you put to me.

Q. If I have put a hypothetical description, it is a hypothesis based on the evidence in this case. Assuming that the evidence is true and that these sections correctly represent the occurrence of ore in the fissure, as well as that in the beds, with your knowledge derived from your examination of all the workings, you would

not hesitate to state as your opinion that none of that ore was deposited from solutions which came from the Crescent fissure?

A. I would not, and I would say that this section gives a picture of a faulting drag vein, more than of a fissure vein.

(PLAINTIFF'S EXHIBIT 1, UNITED STATES PATENT TO THE CONKLING LODE MINING CLAIM.)

Department of the Interior,
General Land Office.

Washington, D. C., June 11, 1908.

I hereby certify that the annexed copy of patent is a true literal exemplification from the record in this office.

In Testimony Whereof, I have hereunto subscribed my name and caused the seal of this office to be affixed, at the City of Washington, on the day and year above [written.]

[SEAL.]

H. W. LANGFORD,
Recorder of the General Land Office.

4—462.

General Land Office.

No. 19811.

Mineral Certificate, No. 1697.

The United States of America to all to whom these presents shall come, Greeting:

Whereas, In pursuance of the provisions of the Revised Statutes of the United States, Chapter Six, Title Thirty-two, and legislation supplemental thereto, there have been deposited in the General Land Office of the United States the Plat and Field Notes of survey and the Certificate No. 1697, of the Register of the Land Office at Salt Lake City, in the territory of Utah, accompanied by other evidence where'y it appears that the "Boss Mining Company"

281 did on the twenty-ninth day of December A. D. 1890, duly enter and pay for that certain mining claim or premises, known as the Conkling lode mining claim, designated by the Surveyor-General as lot No. 689, embracing a portion of the unsurveyed public domain, in the Uintah Mining District, in the County of Summit, and territory of Utah, in the District of lands subject to sale at Salt Lake City, and bounded, described, and platted as follows, with magnetic variation seventeen degrees and twenty minutes east,

Beginning at corner No. 1 a pine post four inches square marked U. S. 689 P. 1. Thence first course north twenty-one degrees and nine minutes west three hundred feet to discovery point six hun-

dred feet to corner No. 2, a pine post four inches square marked U. S. 689 P. 2, being also corner No. 4 of lot No. 191, the Lincoln lode claim, and corner No. 2 of lot No. 580 the Pirate King lode claim from which U. S. mineral monument No. 4 bears north thirty-two degrees and fifty-two minutes west nine hundred and thirty-nine and three-tenths feet distant; and a pine tree four inches in diameter marked U. S. 689 P. 2, B. T. bears north thirteen degrees west twenty-eight feet distant.

Thence second course, south sixty degrees and forty-five minutes west one thousand five hundred feet to corner No. 3.

Thence third course, south twenty-one degrees and nine minutes east six hundred feet to corner No. 4.

Thence fourth course, north sixty degrees and forty-five minutes east one thousand five hundred feet to corner No. 1, the place of beginning; said lot No. 689 extending one thousand five hundred feet in length along said Conkling vein or lode, and containing twenty acres and forty-five hundredths of an acre of land more or less.

Now Know Ye, That there is therefore hereby granted by the United States unto the said "Boss Mining Company and to its successors and assigns, the said mining premises hereinbefore described, and not expressly excepted from these presents, and all that portion of the said Conkling vein, lode, or ledge and of all other veins, lodes, and ledges, throughout their entire depth, the tops or apexes of which lie inside of the surface boundary lines of said granted premises in said Lot No. 689, extended downward vertically, although such veins, lodes or ledges in their downward course may so far depart from a perpendicular as to extend outside the vertical side lines of said premises: Provided, that the right of possession to such outside parts of said veins, lodes or ledges, shall be confined to such portions thereof as lie between vertical planes drawn downward through the end lines of said Lot No. 689, so continued
285 in their own direction that such planes will intersect such exterior parts of said veins, lodes or ledges; And Provided Further, that nothing herein contained shall authorize the grantee—herein to enter upon the surface of a claim owned or possessed by another.

To have and to hold said mining premises, together with all the rights, privileges, immunities, and appurtenances of whatsoever nature thereunto belonging unto the said grantee—above named and to—its successors and assigns forever; subject nevertheless to the above-mentioned and to the following conditions and stipulations:

First. That the premises hereby granted, with the exception of the surface, may be entered by the proprietor of any other vein, lode or ledge, the top or apex of which lies outside of the boundary of said granted premises, should the same in its dip be found to penetrate intersect, or extend into said premises, for the purpose of extracting and removing the ore from such other vein, lode or ledge.

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Second. That the premises hereby granted shall be held subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local law, customs, and decisions of the courts. And there is reserved from the lands hereby granted, a right of way thereon for ditches or canals constructed by the authority of the United States.

Third. That in the absence of necessary legislation by Congress, the Legislature of Utah, may provide rules for working the mining claim or premises hereby granted, involving easements, drainage, and other necessary means to its complete development.

In testimony whereof, I, Benjamin Harrison, President of the United States of America, have caused these letters to be made patent, and the seal of the General Land Office to be hereunto affixed.

Given under my hand at the City of Washington the twenty-third day of February, in the year of our Lord, One thousand 286 eight hundred and ninety-two, and of the Independence of the United States the one hundred and sixteenth.

By the President:

BENJAMIN HARRISON.

By M. McKEAN,

[L. S.]

Secretary.

I. R. CONWELL,

Recorder of the General Land Office ad Interim.

Recorded Vol. 213, pages 103 to 105, inclusive. Supplemental Transcript.

Filed Nov. 14, 1913.

JOHN D. JORDAN,

Clerk.

287 And thereafter the following proceedings were had in the U. S. Circuit Court of Appeals in said cause, viz:

(Appearance of Messrs. Edward B. Critchlow, William J. Barrette, and William H. King, as Counsel for Appellant.)

United States Circuit Court of Appeals, Eighth Circuit.

No. 3977.

CONKLING MINING COMPANY, Appellant,

vs.

SILVER KING COALITION MINES COMPANY, [—].

The Clerk will enter my appearance as Counsel for the Appellant.

EDWARD B. CRITCHLOW.

WILLIAM J. BARRETTE,

WILLIAM H. KING.

Endorsed: Filed in U. S. Circuit Court of Appeals, May 16, 1913

(Appearance of Counsel for Appellee.)

The Clerk will enter my appearance as Counsel for the Appellee.

W. H. DICKSON.

A. C. ELLIS, Jr.

O. W. POWERS.

THOMAS MARIONEUX.

RUSSELL G. SCHULDER.

Endorsed: Filed in U. S. Circuit Court of Appeals, June 21, 1913

(Appearance of Mr. William D. McHugh, as Counsel for Appellant.)

The Clerk will enter my appearance as Counsel for the Appellant.

WILLIAM D. McHUGH.

Endorsed: Filed in U. S. Circuit Court of Appeals, Aug. 2, 1913.

288

(Order of Submission.)

December Term, 1913.

Wednesday, December 10, 1913.

This cause having been called for hearing, argument was commenced by Mr. E. B. Critchlow for appellant, continued by Mr. William H. Dickson for appellee and concluded by Mr. E. B. Critchlow for appellant.

Thereupon, this cause was submitted to the Court on the transcript of record from said District Court and the briefs of counsel filed herein.

(Opinion.)

United States Circuit Court of Appeals, Eighth Circuit, December Term, A. D. 1915.

No. 3977.

CONKLING MINING COMPANY, Appellant,

vs.

SILVER KING COALITION MINES COMPANY, Appellee.

Appeal from the District Court of the United States for the District of Utah.

Mr. E. B. Critchlow (Messrs. Pierce, Critchlow & Barrette, Mr. William D. McHugh and Mr. William H. King, were with him on the briefs), for appellant.

Mr. William H. Dickson (Mr. A. C. Ellis, Jr., Mr. Russell G. Schulder, Mr. O. W. Powers and Mr. Thomas Marioneaux, appeared with him on the briefs), for appellee.

Before Sanborn and Smith, Circuit Judges, and Pope, District Judge.

Statement.

This is a suit to quiet the title to an undivided three-fourths of the Conkling Mining claim and to recover of the defendant three-fourths of the value of the ore which it has removed from the Elephant stope beneath the surface of the Conkling claim. The parties to the suit admit that the plaintiff is the owner of the undivided three-fourths of that claim under a patent issued to its predecessor in interest on February 3, 1902, whereby the United States conveyed that claim in the usual way, "bounded, described and platted as follows, with magnetic variation seventeen degrees and twenty minutes east.

"Beginning at corner No. 1 a pine post four inches square marked U. S. 689 P. 1. Thence first course north twenty-one degrees and nine minutes west three hundred feet to discovery point six hundred feet to corner No. 2, a pine post four inches square marked U. S. 689 P. 2, being also corner No. 4 of lot No. 191, the Lincoln lode claim and corner No. 2 of lot No. 580 the Pirate King lode claim from which U. S. mineral monument No. 4 bears north thirty-two degrees and fifty-two minutes west nine hundred and thirty-nine and three-tenths feet distant; and a pine tree four inches in diameter marked U. S. 689 P. 2 B. T. bears north thirteen degrees west twenty-eight feet distant.

"Thence second course, south sixty degrees and forty-five minutes west one thousand five hundred feet to corner No. 3.

"Thence third course, south twenty-one degrees and nine minutes east six hundred feet to corner No. 4.

"Thence fourth course, north sixty degrees and forty-five minutes east one thousand five hundred feet to corner No. 1, the place of beginning; said lot No. 689 extending one thousand five hundred feet in length along said Conkling vein or lode, and containing twenty acres and forty-five hundredths of an acre of land more or less."

The defenses were two, first, that the ore was taken from the westerly 135.5 feet of the claim described in the patent and that this part of the claim was not conveyed by the patent because the posts set by the government surveyor to mark the westerly corners of the claim were only 1,364.5 feet distant respectively from the easterly line of the claim, and second, because the ore taken from beneath the surface of the Conkling claim was a part of the Crescent fissure vein which had its apex in defendant's Constitution, Cumberland and Monroe Doctrine claims, crossed the side lines of those claims in its course, and, on its dip, extended through the vertical planes passing through their end lines and beneath the surface of the Conkling

claim to the Elephant stope, that the end lines of defendant's claims became their side lines, that defendant's claims were prior in time and superior in right to those of the owners of the Conkling claim, and that, therefore, the defendant was the owner of the ore taken from the Elephant stope. Upon final hearing the court below sustained each of these defenses and the plaintiff appealed.

Per Curiam:

It is a general, but not a universal, rule that monuments mentioned in a description of land prevail over courses and distances, and it was upon this rule that the defendant founded its first defense. The evidence produced to sustain it consisted of the field notes of 290 the survey of the claim which were made on November 1, 1889, by the United States Surveyor which recited that a pine post 4 feet by 4 inches by 4 inches was set at its northwesterly corner and marked "U. S. 689 P. 3," and another at the southwesterly corner of the claim marked "U. S. 689 P. 4," that these posts were 1,500 feet distant from the easterly line of the claim, the location of which is admitted, and that the area of the claim was 20.45 acres, and (2) the testimony of witnesses that they found these stakes years after the survey 1,364.5 feet distant from the easterly line of the claim. In addition to this testimony a large number of plats and field notes of other claims in the vicinity of the Conkling claim, and some other evidence, was introduced, but the testimony that these stakes were found by two or three surveyors, sometimes lying on the ground and sometimes standing in a mound of stones about 1,364.5 feet distant from the easterly line of the claim, is the most substantial and persuasive evidence that they were originally placed by the surveyor at about that distance from the easterly line. This testimony and all the other evidence upon this subject has been carefully read more than once and deliberately considered in view of the established rule that the finding of the chancellor should not be disturbed unless it clearly appears that he has made a serious mistake of fact, or has fallen into some plain error of law. The testimony presents two questions: First, may the plain and unambiguous grant by a patent of the United States of a tract of land be revoked or avoided in whole or in part by a collateral attack by means of evidence dehors the patent years after the grant, and second, if it may be, does the evidence in this case clearly prove that it was not the intention of the parties to the patent that the United States should grant thereby a tract of land 1,500 feet in length, and that it should grant a tract of land only 1,364.5 feet in length, for, after all, the intention of the parties, if it can be lawfully and surely ascertained, must prevail. The court below was of the opinion that the first question did not arise in this case because the patent recited that whereas there had been deposited in the General Land Office "the plat and field notes of survey * * * accompanied by other evidence whereby it appears that the Boss Mining Company did on the twenty-ninth day of December, A. D. 1890, duly enter and pay for that certain mining claim or premises known as the

Conkling lode mining claim designated by the surveyor as lot No. 689 and bounded, described and platted as follows," (as set forth in the statement preceding this opinion) "Now, Know Ye, that there is

291 hereby granted by the United States unto the said Boss Mining Company, and to its successors and assigns, the said mining premises hereinbefore described," and that portion of the Conkling lode and all other veins, lodes and ledges the tops or apexes of which lie inside of the surface boundary lines of said granted premises in said lot No. 689 extended downward vertically.

* * * "Provided that the right of possession to such outside parts of said veins, lodes or ledges shall be confined to such portions thereof as lie between the vertical planes drawn downward through the end lines of said lot No. 689," and the opinion of the court below was that this reference in the Patent to lot No. 689 imported into that patent and made a part of the description in the patent the field notes and the calls therein for the posts the field notes described as located at the westerly corners of the claim. In support of this position *Rutherford vs. Tracy*, 48 Mo. 325; *Lodge's Lessee vs. Lee*, 6 Cranch 237 and *Keith vs. Reynolds*, 3 Greenleaf, 339, which hold that where a specific island, town lot or farm is granted followed by boundaries which include only a part of it, the entire island, lot or farm will pass, were cited. Under these decisions, however, the grant of this lot No. 689 according to the plat followed by a boundary of a part of the lot by courses and distances indicated by the field notes would convey the entire lot according to the plat which showed the lot to be 1,500 feet in length, although the courses and distances included only a part of it, and that ruling would defeat the defense in hand.

When, however, the origin, nature and effect of a patent and the plain terms of the description in the one in hand are considered it becomes clear that the theory that the reference to the field notes and to the surveyor's number of the lot made the field notes and the calls therein a part of the description, is untenable. A patent of land within the jurisdiction of the Land Department of the United States, and this land was within its jurisdiction, is the judgment of that tribunal upon the evidence before it that the patentee is entitled to the land therein described and the conveyance of the legal title to the land to the patentee in execution of the judgment. The Land Department is a special tribunal vested with judicial power to hear and determine the claims of all parties to the public lands which it is authorized to dispose of, and its judgment, evidenced by its patent, is conclusive of the right of the claimant and the United States to such land and of every issue which it was necessary for the Land Department to decide in determining those rights. The validity, the extent and the boundaries of the claim in this case, and in every case, are unavoidable issues which it must ad-
292 judge in sustaining any part or all of the claim in hand, or any other claim of this character. Its adjudications of matters within its jurisdiction are like those of other judicial tribunals, impervious to collateral attack. They may be avoided only by a direct suit for that purpose on the ground of fraud or error of law,

and there is no such proceeding here. *Smelting Co. vs. Kemp*, 104 U. S. at page 646, 666; *King vs. McAndrews*, 111 Fed. 860, 863; *Uinta Tunnel Min. & T. Co. vs. Creede & C. C. Min. & M. Co.*, 119 Fed. 164, 166; *Golden Reward Min. Co. vs. Buxton Min. Co.*, 79 Fed. 868, 874; *Carson City Gold & S. M. Co. vs. North Star Min. Co.*, 73 Fed. 597, 600; *Doe vs. Waterloo Min. Co.*, 54 Fed. 935, 940; *Waterloo Min. Co. vs. Doe*, 56 Fed. 685. The applicant for the land and the patent in this case had the right under the acts of Congress to locate and purchase from the United States a mining claim 1500 feet long and 600 feet wide, and it is conceded that it claimed and applied for a patent to a tract of these dimensions. In order to entitle it to the patent it was required to locate the tract it claimed and applied for so that its boundaries could be readily traced, section 2324, Revised Statutes United States, to file in the proper land office an application for the patent together with a plat and field notes of its claim made by and under the direction of the Surveyor General of the United States showing accurately the boundaries of its claim, which should be distinctly marked on the ground, to post a copy of such plat with a notice of its application for a patent on the land platted, to file an affidavit of two persons that the notice had been duly published sixty days, to file with the register of the land office a certificate of the United States Surveyor General that five hundred dollars' worth of labor had been expended by the applicant or his grantors in improvements on the claim and that the plat is correct, and to file his affidavit that the plat and notice have been posted. Section 2325, Revised Statutes. Whether or not the applicant has complied with these and other conditions of his right to the land thus specified by the acts of Congress and is entitled to a grant of the land, is the ultimate question which the Land Department is empowered and required to decide in the issue of every patent for such a mining claim as that here in controversy. The proceeding in the Land Department is judicial in its character, in the nature of a proceeding in rem, and its judgment by default, where the proper notice of the application has been given, is as conclusive and impervious to collateral attack as its judgment after a contest. *Golden Reward Min. Co. vs. Buxton Min. Co.*, 79 Fed. 868; *New Dunderberg Min.*

Co. vs. Old, 79 Fed. 598. Now the proof is uncontradicted 293 that the plat of this claim showed it to be 1500 feet long and 600 feet wide. The field notes, that plat, proof that a copy of that plat was posted on the land and the certificate of the United States Surveyor General that the plat was correct were required to be, and the legal presumption is that they were, in evidence before the Land Department when it rendered its judgment. The patent itself recites that the plat and the field notes accompanied by other evidence were before it. The field notes recited that the claim was 1500 feet long and 600 feet wide, that there was a post at each corner and described each post and its location. The plat portrayed the tract 1500 feet long and 600 feet wide. The patent recites that there was other evidence. On all this evidence the department adjudged and conveyed to the patentee a tract "bounded, described and

platted as follows" and then set forth a boundary by course and distance carefully describing the two posts at the east end of the claim mentioned in the field notes, and as carefully disregarding and omitting all reference to the two posts at the west end of the claim mentioned in the field notes and adjudging the second course to be "south sixty degrees and forty-five minutes west one thousand five hundred feet to corner No. 3," the third course to be south twenty-one degrees and nine minutes east six hundred feet to corner No. 4" and the fourth course to be "north sixty degrees and forty-five minutes east one thousand five hundred feet to corner No. 1, the place of beginning," and adding "said lot No. 689 extending one thousand five hundred feet in length along said vein or lode and containing twenty acres and forty-five hundredths." Here was a direct and conclusive adjudication on its face (1) that the field notes and the posts and calls therein were not parts of the description in the patent, but were only a part of the evidence upon which the adjudication was based, (2) that the two posts at the easterly end of the tract mentioned in the field notes marked the easterly corners of the tract conveyed and (3) that the tract so conveyed extended fifteen hundred feet westerly from the easterly line on the courses stated in the description and contained twenty and forty-five hundredths acres, without regard to the location of the westerly posts which were described in the field notes but were not mentioned in the patent. This adjudication was impervious to collateral attack. The description contained in the patent was free from ambiguity and the field notes and parol testimony which were offered in the court below were incompetent in this suit indirectly to revoke and avoid the grant to the patentee of the westerly 135.5 feet of the 1500 feet which were clearly adjudged and conveyed to it by the patent.

294 Nor is this all. The court is of the opinion that if all the evidence offered had been competent it would have been insufficient to overcome the strong presumption that the plain description in the patent was right, insufficient to overcome the facts that the plat showed the claim to be 1500 feet in length and 600 feet in width, that the Surveyor General certified that the plat was correct, that the field notes recited that the claim was 1500 feet in length and 600 feet in width, that the field notes, the plat and the patent each declare that the area claimed was 20.45 acres, that this is the area of a tract 1500 feet in length and 600 feet in width, while the area of a tract 1364.5 feet in length and 600 feet in width is nearly two acres less, and the persuasive presumption that the plain description in the patent expressed the actual intention of the parties to it. These considerations have left no doubt that the court below made a mistake in its finding that the patent did not convey the westerly 135.5 feet of the land described in it and have satisfied our minds that it conveyed, and the plaintiff now owns, the tract 1500 feet in length and 600 feet in width so clearly described in it.

Nor has this conclusion been reached without deliberate consideration of the general rule that in cases of conflict monuments prevail over courses and distances and of the amendment of 1904 to

section 2327 of the Revised Statutes, 10 Stat. Ann. 235, which provides: that "where patents have issued for mineral lands, those lands only shall be segregated and shall be deemed to be patented which are bounded by the lines actually marked, defined and established upon the ground by the monuments of the official survey upon which the patent grant is based. * * * The said monuments shall at all times constitute the highest authority as to what land is patented, and in case of any conflict between the said monuments of such patented claims and the descriptions of said claims in the patents issued therefor, the monuments on the ground shall govern." But the general rule is not without exception.

It is but one of many rules for construing and applying descriptions in conveyances to the land described. The sole object of this and of all other such rules is to aid in ascertaining the land which the parties intended to convey, and where, as in the case at bar, the description in the patent is unambiguous and the intent of the parties is clear beyond doubt to convey the tract so described that intent must prevail over this or any other rule of construction or application the only purpose of which is to aid in ascertaining such intent.

295 And there are many reasons why the amendment to the statute which has been quoted ought not to be permitted to revoke or modify the grant of a patent which the United States unquestionably intended to make and did make, and which the patentee applied for, earned and received years before that amendment was enacted. The amendment was passed and approved twelve years after the United States had conveyed this land to its patentee and it could not by its mere legislative fiat revoke that grant and take from him, or from subsequent purchasers of it from him, the land it had conveyed twelve years earlier, or any part of it. In the second place there is in this case no conflict between the courses and distances and the monuments named in the patent, and parties cannot be and ought not to be permitted to import into a clear and perfect description in the patent by parol evidence nineteen years after its issue monuments not mentioned therein to create a conflict between those monuments and the courses, distances and clear description and area stated in the patent, and then by the aid of the amendment of 1904 to destroy or diminish by means of these imported monuments, the grant. It cannot have been the intention of Congress that this amendment should apply to a prior grant under such circumstances as this case presents. And finally, the proof that the westerly posts of the official survey upon which this patent was granted were originally set only 1,354.5 feet distant from the easterly line of the claim is not of that certain and satisfactory character which would warrant a court in avoiding, so many years after the issue of the patent, the grant which the United States clearly made. The defendants cannot deprive the plaintiff of the land described in his patent by means of the proof of the finding of these old posts which was introduced in this case.

We turn to the second defense. Does the evidence sustain the defendant's claim to the ore in the Elephant stope beneath the sur-

face of the plaintiff's Conkling claim on the ground that this ore is a part of the Crescent fissure vein whose apex is found within and on its strike crosses the side lines of the defendant's Constitution, Cumberland and Monroe Doctrine claims, while on its dip it passes through the vertical planes of the end lines of these claims and beneath the surface of the Conkling claim? Upon the face of the patents this claim is baseless because the owner of a mining claim has no extra-lateral rights beyond the end lines of his claim extended vertically downward. The defendant concedes this but invokes the exception to this rule that when by mistake the locator

296 places his claim across instead of along the vein or lode which he discovers so that the latter crosses the side lines of his claim, his side lines become his end lines and he may follow the lode or vein on its dip beyond the vertical plane of the end line of his claim. But this extra-lateral right is a special privilege, an exceptional right, and the burden was on the defendant to bring itself within the exception. The burden was on it to prove that the discovery vein in each of its three claims extended across and not along the claim and that the locator by mistake placed each claim across instead of along its discovery vein. This burden rests on every party who claims a right not common to all which is given only when a prescribed state of facts shall exist. He must prove the existence of the prescribed facts. The "Edith" 94 U. S. 518.

The evidence in this case established these facts: Each of the defendant's claims was patented on March 31, 1883. The plaintiff's claim was located in 1889 or 1890 and was not patented until 1892. The ore in dispute could not be reached by any lode or vein extending on its strike lengthwise of either of defendant's claims and on its dip through the vertical plane of any side line of any of these three claims. The record discloses no claim of the locator of either of these claims, or of any of his successors in interest that through the mistake of any of them the end lines were its side lines during twenty-five years after these claims were patented. Meanwhile the plaintiff's Conkling claim and many other surrounding claims were located and went to patent. Each of the defendant's claims is 1,500 feet long and 200 feet wide and on each of them there is a discovery pit or cut near the center of the claim and more than 400 feet northwesterly of the Crescent fissure which crosses the claims on its strike about 100 feet northwesterly of the southeasterly end lines of the claims and extends on its dip through the vertical planes of those lines extended downward to the Elephant stope beneath the surface of the Conkling claim. The defendant introduced the testimony of witnesses that at various places beneath the surface of its claims where tunnels had been run and where explorations had been made no longitudinal veins had been found, but that small veins running crosswise of the claims and the large vein called the Crescent fissure vein had been discovered and the defendant contends that by this testimony it has established by a preponderance of evidence the facts that the locator of each of these claims by mistake placed them across when he intended to place them along his discovery vein. But the portions of the grant be-

neath the surface of the defendant's claims which its witnesses examined and in which they found no longitudinal veins was but a small percentage of the entire ground beneath the surface of these claims. There was a discovery cut or pit on each claim. Witnesses estimated that these cuts were from three to five feet deep. They had caved in. The ground in and under them or along the course where a longitudinal vein under them would extend had not been explored or examined by any witness to such an extent that he could testify with actual knowledge that there was no longitudinal vein beneath them. Defendant's counsel argue, however, that the testimony of these witnesses that they found no longitudinal veins in the small parts of the ground beneath the surface which they examined is sufficient, together with the opinions of these witnesses, to establish the facts that there are no longitudinal veins in the claims and that the only vein or lode there is or ever was in these claims is the Crescent fissure vein, and they insist that since, when these claims were located, nothing was required of the locator but the discovery of a vein or lode of rock in place and the marking of the boundaries of the claim, this evidence is sufficient to sustain the conclusion that the Crescent fissure vein was the discovery vein of each of these claims. The evidence upon the issue here under consideration is not stated and will not be discussed at length in this opinion because that course would unduly extend it. It has, however, been carefully read and thoughtfully considered. The legal presumption is, and the probability is, that the locator of the defendant's claims thought he had discovered a longitudinal vein in each of these claims in his discovery cut or pit, or he would not have located his claim lengthwise of such a vein. The fact that he made his discovery pits more than 400 feet northeasterly of the apex of the Crescent fissure cross vein which dips southeasterly and that he did not locate his claims lengthwise of that vein, convinces that the Crescent fissure vein was not his discovery vein, and that it was only a cross vein in claims whose discovery veins ran lengthwise of the claims, and in the absence of the testimony of the locator himself or of any witness who knew the facts and circumstances of the discovery of the veins in these claims and of their location, the existence and location of the discovery pits, the location of the claims across and not along the Crescent fissure, the twenty-five years that elapsed after the patents to these claims were issued before the locator or any successor in interest claimed that any mistake had been made in their location, the subsequent location and patent meanwhile of surrounding claims during these twenty-five years and the legal presumption that the locator of each

257 of the defendant's claims discovered a vein and located his claim lengthwise thereof, converge with compelling power to force our minds to the conclusion that there is no preponderance of evidence in this case that the locator of any of the defendant's claims placed it crosswise of his discovery vein. And the result is that the end lines of these claims never became their side lines, and the defendant is without right to three-fourths of the ore which is,

298

and to three-fourths of the ore which was, beneath the surface of the Conkling claim.

The end lines of a claim as the locator places them, with the single exception that when by mistake he locates his claim across instead of along the vein he discovers, fixes the limit beyond which he may not go in the appropriation of any vein or veins whose apex or apexes are found within the surface lines of his claim and the end lines of the original discovery vein are the end lines of all the veins discovered within the surface boundaries of his claim. Section 2322, Revised Statutes; *Walrath vs. Champion Mining Co.*, 171 U. S. 293, 307, 308.

The conclusion which has been reached upon the investigation — the questions already discussed renders the other questions of law and fact in this case immaterial, and the decree below must be reversed and the case must be remanded to the trial court for further proceedings consistent with the views expressed in this opinion.

And it is so Ordered.

Filed February 12, 1916.

(Decree.)

United States Circuit Court of Appeals, Eighth Circuit, December Term, 1915.

No. 3977.

CONKLING MINING COMPANY, Appellant,

vs.

SILVER KING COALITION MINES COMPANY, [—].

Appeal from the District Court of the United States for the District of Utah.

Saturday, February 12, 1916.

This cause came on to be heard on the transcript of the record from the District Court of the United States for the District of Utah, and was argued by counsel.

299 & 300 On consideration whereof, it is now here ordered, adjudged and decreed by this Court, that the decree of the said District Court, in this cause, be, and the same is hereby, reversed with costs; and that the Conkling Mining Company have and recover against the Silver King Coalition Mines Company the sum of — Dollars for its costs in this behalf expended and have execution therefor.

It is further ordered that this cause be, and the same is hereby, remanded to the said District Court for further proceedings consistent with the views expressed in the opinion of this Court.

February 12, 1916.

301 In the United States Circuit Court of Appeals, Eighth Circuit.
No. 3077.

CONKLING MINING COMPANY, a Corporation, Appellant,

vs.

SILVER KING COALITION MINES COMPANY, a Corporation, Appellee.

Petition of Appellee in the Above Case for a Rehearing.

Comes now the said appellee and respectfully petitions this Honorable Court for a rehearing of said cause for the following reasons, to-wit:

1. Not only is there substantial evidence to sustain the decision of the trial court, that the monuments erected by the United States Deputy Mineral Surveyor who surveyed the Conklings claim for patent, to fix and mark the northwest and southwest corners of the claim were by him erected in the respective positions testified to by the witnesses for the defendants, but it may be said that this testimony is practically free from conflict; hence, the decision of that court upon this question of fact should not, under the well-settled rule, be disturbed by the appellate court.

2. That there is not found in the record any evidence, nor is any fact therein disclosed which should make this case an exception to the general rule that where a deed or patent contains a description by courses and distances of the premises granted and it is found that such description is in conflict with the monuments erected by the parties to the grant, to mark the boundaries thereof, the latter control.

302 3. The defendant (appellee) is entitled under the law to follow extralaterally in its downward course the Crescent fissure vein between planes drawn vertically downward through the located side lines of the Constitution, Cumberland and Monroe Doctrine claims owned by it; since the record discloses by substantial and uncontradicted evidence that there is not found in either of these claims the top or apex of any vein which does not on its course cross the located side lines of each of the claims substantially at right angles thereto.

In urging this Honorable Court to grant a rehearing in this case, we feel that we are justified in saying that the questions involved are not only of great interest to the parties here litigant, but that they must deeply concern many owners of mining claims throughout the western states, and the importance of a correct solution thereof can scarcely be overestimated.

We will first present, with as much brevity as is consistent with fairness, the substance of the evidence received to establish the original post or monument erected by the Surveyor to mark and

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mate the northwest and southwest corners, respectively, of the claim.

And later on we will show from the record that the Conkling claim, as located, did not embrace any part of the 135.5 foot here in controversy.)

Now, it appears from the field notes of the Conkling (Exhibit "O") the claim was officially surveyed on the 19th of November, 1889, by Adolph Jessen (long since deceased). Mr. C. P. Brooks testified on August 27, 1901, when he was engaged in making a survey of the 20th Century lode he found corner No. 4 of the Conkling located "Post 4, U. S. 689," standing in a mound of stones and that of No. 4 of the 20th Century, as placed by him, was identical with corner No. 4, or the southwest corner of the Conkling; that in 1907, when he was engaged in making a survey of the San Pedro claim he found that post No. 4 of the Conkling had been pulled out, but he found the mound of stones in the same place he had found it before; that a corner of the San Pedro, as surveyed by him, was practically co-incident with the southwest corner of the Conkling—they were a foot or two apart; that in September, 1908, he was at that corner and found there the mound of stones for corner No. 4, but there was no post, but the San Pedro post standing where he had originally placed it. (p. 84.) In the Conkling field notes it is stated that

"3 of L. 580, Pirate King lode, and northwesterly corner of this claim, both on line; said latter corner being a pine post 4 ft. x 4 in. x 4 in. firmly set; mark same U. S. 689 P. 3 for post No. 3, from which a balsam 14 in. in diameter bears south 45 deg. 15 min. east 28 feet distant and a red pine 17 in. in diameter north 16 deg. 15 min. east 35 feet distant, both marked U. S. 689 B. T.; thence south 21 deg. 9 min. east along southwesterly line of claim; 600 feet southwesterly corner of claim a pine post 4 in. x 4 in. firmly set on line, mark same U. S. 689 P. 4 for corner No. 4." (p. 82.)

In the field notes of the Pirate King, it is stated

"In post No. 3 a balsam pine 14 inches in diameter bears south 45 deg. 15 min. east 28 feet distant, marked U. S. 580, P. 3, B. T."

Brooks testified that he found a tree so marked; that it was standing, that his notes show that it bears south 39 deg. 37 min. east 28 feet distant, while the field notes call for south 45 deg. east 28 feet distant, that the tree as he found it is marked with a triangle, with a little representation of a pine tree upon his Exhibit B, and marked "Nail in red balsam," etc., that it was set upon the ground, and that if we were to take the course and distance as called for in the field notes of the Pirate King, this would be as represented on Exhibit B, by the dotted blue line and blue circle marked "BT" in a southerly direction from the position mentioned in the notes; that the field notes of the Conkling men-

tion a red pine 17 in. in diameter, marked "U. S. 689, P. 3, B. T."; that he found this tree standing, marked as called for; that he found the course nearly the same as that found in the official field notes, but a difference in distance. The difference was that between 22.1 and 35 feet; that taking the bearing trees as found upon the ground and the courses and distances as called for in the field notes, it would place the southwest corner of the Pirate King substantially where it was platted by him, within a foot or two. (p. 80.) That the patent call, marked in black on Exhibit B, on the westerly end line of the Conkling is south 21 deg. 8 min. east 600 feet, and that as he makes it, marked in red, it is south 21 deg. 12 min. and 30 sec. east 600 feet. (p. 84.)

And on cross-examination this witness testified:

"In 1908 I was at the northwest corner of the Conkling as I have it platted. The field notes of the Conkling called for two bearing trees. As I have platted the northwest corner it does not correspond with the course and distance that the field notes called for for either of those bearing trees. If I take the course and distance from one of those bearing trees according to the field notes of 304 the Conkling, the corner post would be about 13 feet southerly from where I have marked it upon the map. I have marked the place with a pencil circle with a large 'A' pointing to it. If I take the other bearing tree and take the course and distance according to the field notes, it would place the corner northwesterly from where I have put it on the map approximately at the dot in the letter 'i' in the word 'daylight,' which would be about 31 feet northwesterly and less than 20 feet west of the line. It is utterly impossible for any surveyor to locate that corner from those bearing trees with the field notes as to the direction." (p. 85.)

And on re-direct:

"If I lay my ruler on the west end line of the Conkling as platted on Exhibit B, I find the corners which I have designated in my answers to questions on cross-examination to be $8\frac{1}{2}$ feet and $16\frac{1}{2}$ feet respectively, westerly of the line, a line projected. Taking the calls in the field notes of the Conkling for those two bearing trees, it would be absolutely impossible to locate the northwest corner of the claim therefrom. The two calls do not check and you have two posts, if you take the tree. Evidently the corner would be between those two trees, but, taking the courses and distances called for in the field notes, you couldn't locate the northwest corner. The maximum error would be 15 feet, as far as the westerly line is concerned. In determining the particular point at which I should have and did plat that corner, I found an old stake in a mound of stones, marked 'U. S. 580, P-3.' That stake I was not sure of being the original stake. It did not answer the exact description as to the mound of stones there. It was a Pirate King stake, and alongside of it on the ground a hewn post, marked 'U. S. 689.' This was not standing in the mound. It was this mound which I selected as the particular point for this patent corner. It agreed so closely with my position of the southwest corner that I accepted it."

Mr. J. Fewson Smith, a mining engineer, testified that he made a survey of the Arctic mining claim in November, 1897, that in making that survey he found the northwest corner of the Conkling claim, but has no recollection as to whether he found the southwest corner or not; that he found as designating the northwest corner of the Conkling a post in place; that his notes of survey merely stated that he tied to that corner but did not describe the post; that he determined the northwest corner of the Conkling to which post
305 No. 3 of the Arctic was tied, by the fact that near the post were standing, agreeing in general to the description and location in corrected relation, two large trees which are marked as bearing trees to that corner; that he had with him the official survey of the Conkling claim and used it in determining that this post was either rightly placed or very close to it; that it had all the marks which the field notes called for. (pp. 86-87.)

Mr. Gorkinski testified that he was a mining engineer, that in June, 1902, he made an official survey of the Custer No. 2 and Silver Hill, No. 4 claims; that he did not find post No. 4 of the Conkling but did find post No. 4 of the 20th Century; that at that time he sought to verify the location of the southwest corner of the Conkling by finding another post of that claim; that he went to the northwest corner of the Conkling where he found post No. 3; that it was a post firmly set in the ground, marked "U. S. 580-P. 3;" that in going from the southwest corner of the Custer to the northwest corner of the Conkling, he determined what course to take from the field notes of the Conkling; that he surveyed a very careful transit line, from which he deduced a direct course in distance; that he found the course and distance of the direct line between U. S. 689-P. 3, as found by him, and 4-4648, 20th Century, to be south 21 deg. 16 min. 58 sec. east 598.94 feet; that it varied from the line on the map, Exhibit B, 1.6 feet in distance and about 5 minutes in course; that when he was at the northwest corner of the Conkling, he found two bearing trees; that the two trees bore from the stake, U. S. 580-3, southeast corner of the Pirate King, as follows:

"A red pine tree bears north 19 deg. 10 min. east 22 feet. I connected with it. The tree was marked 'U. S. 689-P-3 B. T.'"
(p. 93.)

That the distance of that tree from the post he found marked "580-P-3" was 22 feet; that the other tree bore north 40 deg. 10 min. west 26.5 feet; that he did not take the bearing of the tree itself but took the average of the blaze; that it was marked for the two claims "U. S. 580" and "U. S. 689."

In rebuttal appellant called Mr. Wilson, who testified that in October, 1909, he was at the place shown upon Exhibit A as the northwest corner of the Conkling; that he found there an old post lying on the ground, marked "U. S. 689, P-3," also a small piece of a corner stake 2 x 4 standing up but rotten in the end and set in a mound of stones, marked "U. S. 580, P-3;" that the post lying on the ground was within a few feet of the other small 2 x 4; that the 2 x 4 post

marked "P-3, 580," was an ordinary 2 x 4 timber; that it was a little bit short of those dimensions; that upon taking it up he saw that the point of it was rotting in the mound (pp. 85-86): and

Mr. Frank Anderson, who testified that he was at the point marked upon defendant's Exhibit A as the northwest corner of the Conkling, in September, 1908; that he found there a post lying down about 3 feet from where that point is marked, a hewed pine post 5 inches in diameter, 5.4 feet long, and described "U. S. 689, P-3;" that he also found a sawed pine stick 11½ inches (1½?) by 3½ inches 1¾ feet out of the ground, in a small mound scribed "U. S. 580, P-3;" that he was familiar with the field notes of the Pirate King and Conkling; that the Conkling field notes called for two bearing trees at corner No. 3; that neither the place where this post was lying on the ground, nor the point where the other post was standing on the ground corresponded with the distance and direction called for in the Conkling field notes; that the Pirate King field notes called for a bearing tree at that corner or post No. 3; that this was also one of the bearing trees called for in the Conkling field notes; that the post he found in the ground marked "U. S. P-3, 580," was not at the place where the distance and direction from the bearing tree, as called for by the Pirate King notes locates the point; that there is no post at the point at which he would arrive by starting from the bearing tree marked with the Pirate King mark, and taking a course and distance from that bearing tree, as called for in the Pirate King field notes. (p. 156.)

On cross-examination he testified that he found two bearing trees marked in the way described in the field notes of the Conkling; that taking the balsam tree which was marked "U. S. 689, P-3," and "U. S. 580, P-3," and running out to the position of the post from the call would make its position about 20½ feet to the westerly; that P-3 as claimed by the defendant he has indicated with a pencil mark in a circle; that the figures 2778 were just to the northwest of corner No. 3 of the Conkling as marked on that Exhibit; that drawing a line through that parallel to the west end line, it would place it west of where it is on Exhibit A 17 feet; that in taking the pine tree, according to the calls in the field notes, and drawing a line through that parallel to the end line of the Conkling, it would fall about 3 feet—that is as near as he could measure it, to the west of the end line. (pp. 156-157.)

Throughout the trial there was not a suggestion that either of these bearing trees testified to by the witnesses as still standing with the marking or scribing thereon, corresponding exactly with that called for in the field notes of the Conkling, is not the tree called for in these notes and so marked or scribed by Mr. Jessen at the time he made his survey of this claim. Now, if these are the trees called for in the field notes, it is thereby alone conclusively established that corners No. 3 and No. 4, as monumented by Mr. Jessen at the time of his official survey, must have been substantially as claimed by appellee.

307 (The circle on map Exhibit B, beneath which is written "Post 4 feet by 4 feet by 3 inches," and scribed "corner 3

Conkling newly set" is intended to indicate a post found upon the ground there which was newly set in December, 1910. The other circle beneath which is written "Sawed pine 4 inches by 4 inches, 2½ feet high, scribed corner 4 Conkling, apparently recently set," also indicates the position of a post recently set. These would be the northwest and southwest corners of the Conkling, if the claims were extended 135½ feet further to the west than the original monuments.) (See Brooks, page 95.)

No one claims that in the vicinity of either of the points indicated by these circles there was any bearing tree or mound of stones or anything whatever to indicate that there had been a post there. The suggestion made by appellant that there may have been two sets of bearing trees, one marked by the surveyor and afterwards obliterated, the other marked by interested parties, is, of course, a possibility, but not at all a probability.

It is shown clearly by the testimony of Mr. Wiley, and not questioned, that the blazes and the scribing upon these trees must have been done at least twenty years prior to the time when he first observed them, to-wit, in October, 1911. (p. 90.)

We submit that the decision of the lower court that the Conkling claim, as monumented in the official survey thereof, was only 1364.5 feet in length, finds ample support in the evidence.

II.

Was this evidence competent, or is it true, as announced by this Honorable Court in its opinion, that since the patent calls for no post or monument at either corner No. 3 or corner No. 4, and the description contained in the patent is free from ambiguity, it is not permissible to resort to the field notes of the survey upon which the application for the patent was based, or to any other evidence for the purpose of showing that the monuments erected by the Surveyor to mark the boundaries of the claim are in conflict with that description?

By the act of Congress, U. S. Revised Statutes, Section 2325, it is provided that:

"A patent for any land claimed and located for valuable deposits may be obtained in the following manner: any person * * * authorized to locate a claim under this chapter, having claimed and located a piece of land for such purposes, who has * * * complied with the terms of this chapter, may file in the proper Land Office an application for a patent, under oath * * * together with a plat and field notes of the claim or claims in common, 308 made by or under the direction of the United States Surveyor General, showing accurately the boundaries of the claim or claims which shall be distinctly marked by monuments on the ground."

And the rules and regulations governing United States Deputy Surveyors, in force at the time the Conkling was surveyed for patent, provided in the second paragraph thereof, that:

"The order for an official survey will be issued when written application is made, in which it must be stated whether the claim applied for is properly staked upon the ground."

The fourth paragraph directs that:

"Deputies in making official surveys of mining claims * * * will mark all corners with appropriately inscribed rocks in place, trees not less than 4 inches in diameter in place; stones at least two feet long, planted on end, one foot in the ground, or with posts four inches or more in diameter, planted (if ground will admit of it), two feet in the ground, and protruding not less than two nor more than four feet above ground, both planted stones and posts to be protected with mound of stones or earth in addition to the planting."

The fifth paragraph directs that:

"Corner monuments, whether rocks or trees in place, or planted stones or posts, will be inscribed on the side found or set facing the claim being surveyed thus: 'No. 1, U. S. 37,' 'No. 2, U. S. 37,' etc., the inscription to be cut out three-sixteenths of an inch deep in the stone or wood."

The sixth paragraph directs that:

"The position of all corner marks of whatever description is to be evidenced, wherever practicable, by marking the courses and distances to two or more adjacent trees, prominent rocks, or other permanent and prominent objects, as shafts, tunnels, houses * * * in opposite directions, as nearly as may be * * *

"The letters 'B T' are also to be inscribed, as provided, upon a smaller blaze directly under the large one and as near the ground as practicable."

The seventh paragraph directs that:

309 "All the monuments and witness objects with their inscriptions are to be fully described in their order in the field notes of the survey to which they belong."

The ninth paragraph directs, among other things, that:

"Deputies will make return of all official surveys, within reasonable time * * * and this office will not consider any return of survey made, without the same embraces the following matter, viz:

"a. Complete field notes, showing the boundaries of the claim or claims * * * together with the certificate of the Deputy making the survey in question, that the survey reported by him embraces the identical ground described in the Notice of Location and found within the stakes upon the ground * * *

"d. The affidavit of two disinterested, competent witnesses, that the survey ordered to be made embraces the identical ground described in the Notice of Location, according to which the Deputy was ordered to survey, and hitherto claimed thereunder."

The tenth paragraph directs that:

"The location posts of claims (original) where they are sufficiently identified, must in all cases be connected by course and distance with the posts established by the survey, and such connections set forth in the field notes."

(See Exhibit TT-1.)

These rules, and regulations bear date March 31, 1882. That they were prescribed or adopted and declared to be in force by the Land Department is, as we understand, conceded. See also letter of MacFarlane, Commissioner, under date of April 27, 1882. (Tr. p. 154.)

Lawful rules and regulations prescribed by the several departments of the Government have, in a proper sense, the force of law.

United States vs. Eaton, 144 U. S. 677, 688;

Wilkins vs. United States, 96 Fed. 837, 841;

Brady vs. United States, 98 Fed. 238, 239;

Files vs. Davis, 118 Fed. 465, 468;

Caha vs. United States, 152 U. S. 211, 218-220.

Clearly one of the purposes, perhaps the main purpose, of the statute and of these regulations in requiring the boundaries of the claims to be accurately marked on the ground was that thereby the owner or owners of adjoining or conflicting claims would be informed precisely what ground was to be embraced in the application for patent in order that he or they should be given fair warn-

310 ing and an opportunity to adverse the application if the claim as thus monumented conflicted with a claim of his or theirs.

But this manifest purpose of the law will be subverted if the description by courses and distances contained in the patent—if clear and unambiguous—is to prevail, no matter how widely such description may conflict with the monuments erected by the Surveyor to mark the corners or boundaries of the claim. For instance, A, the applicant, has had his claim surveyed and monumented, as required by the act and the regulations; the claim as so monumented conflicts not at all with senior contiguous claim owned by B. The monuments so erected are equivalent to a declaration by A to B and all the world that they mark the boundaries of the premises for which he is about to apply for a patent. B observes that A's claim, as monumented, does not conflict with his senior location, and relying thereon, as he had a right to do, files no adverse claim to A's application. A procures a patent, which, according to the description by courses and distances therein contained, would embrace or cover a claim 1500 feet in length, or 100 feet, we will say, longer than the claim according to the monuments, established by the official survey

thereof; and the claim so described in the patent conflicts with the senior location of B to the extent of this 100 feet. The decision of this court leads to this result; that B, who had a prior valid location embracing this 100 feet, has lost the same by a failure to adverse A's application, although in such failure he was not chargeable with any fault or negligence. And A has acquired an indefeasible title to this 100 feet in length although he had never made a valid location which covered the same; and this notwithstanding the fact that the monuments which marked the boundaries of his claim were in effect a declaration by him to B that he was not claiming or seeking a patent to any portion of this 100 feet.

Indeed, as we shall see, this very result will have been accomplished in this case if the court adheres to its opinion.

We respectfully submit that it may well be questioned whether a decision which leads to such an injustice as this would be correct.

In *Wesley vs. Hammer*, 223 U. S. 85, the court, at p. 92, says:

"Mineral surveyors are appointed by the surveyor general under Rec. Stat. Sec. 2334, and their field of action is confined to the surveying of mining claims * * * and their work must be done in conformity to regulations prescribed by that officer (Commissioner of the General Land Office). * * * Within the limits of their authority they act in the stead of the surveyor general and under his direction, and in that sense are his deputies. The
311 work which they do is the work of the government, and the surveys which they make are its surveys. The right performance of their duties is of real concern, not merely to those at whose solicitation they act, but also to the owners of adjacent and conflicting claims and to the government."

The patent here in question is based upon the plat and field notes and refers to them. For the purpose, therefore, of determining what land is conveyed by the patent, these field notes are as much a part of the description thereof as though they had been inserted at length in the patent.

With deference we submit that the decision of this court in our case is in conflict with its decision in the case of *Resurrection Gold Mining Co. vs. Fortune Gold Mining Co.*, 129 Fed. 668. There the description contained in the patent was as follows:

"* * * Beginning at corner No. 1, a post four inches square, marked 1-2309, thence south 1 degree 30 minutes west 300 feet to corner No. 2, thence south 88 degrees 48 minutes east 1465 feet to corner No. 3, thence north 1 degree 30 minutes east 300 feet to corner No. 4, thence north 88 degrees 48 minutes west 1465 feet to corner No. 1 at the place of beginning."

There, as here, it will be observed, the patent in describing the claim omits any reference to any post or monument at either of the corners 2, 3 or 4; calling for "corners" merely: and there, as here, the field notes recited that a post marked each corner and contains

a description of each of the posts with the marking or scribing thereon. There, as here, the field notes were introduced for the purpose of showing thereby and by parol evidence that the boundaries of the Fortune claim, as monumented, did not agree with the description by courses and distances contained in the patent. The description contained in the patent in that case was as clear and free from ambiguity as is the description in the patent in this case. The court, at page 671, 672, there said:

"* * * The description of the land in controversy in the patent is copied from and founded upon the field notes of the survey of the claim which were introduced in evidence by the plaintiff, so that, as far as the question here presented is concerned, the case stands as though the field notes were written into the description of the patent. * * * A plain and unambiguous description in a written conveyance can no more be contradicted or modified by parol evidence than any other part of a written agreement. It is only when a patent ambiguity arises in the description itself, or in the application of it to the land, that evidence aliunde becomes admissible for the purpose of fitting the description to the ground to which it refers and of removing uncertainty. When the monuments called for in a conveyance do not correspond with the courses and distances there recited, such an ambiguity necessarily arises, and parol and other evidence is then admissible to remove it. In cases of this character the original monuments called by the patent, if they still remain in place, prevail over the courses and distances noted in the description. If the monuments called have been lost or removed, the places where they were originally located may be shown by parol or other competent evidence; and if proved to the satisfaction of the jury by a fair preponderance of evidence, these original locations will prevail over the courses and distances, and control the application of the description to the land. * * *

The patent in the case before us disclosed no ambiguity, and presented no conflict between its courses and distances and any monument for which it called at corner No. 3, because it specified no monument at that corner. There was therefore no excuse for parol evidence on the face of the patent, and the courses and distances which it contained were prima facie controlling and consistent with themselves. Thereupon counsel for the plaintiff introduced in evidence the field notes of the survey, and read them into the patent for the purpose of raising the requisite ambiguity upon which its cause of action rests. These field notes recite that the monument at corner No. 3 was 'a post 4 inches square, 4 feet long, set 2 feet in ground, marked 3-2309,' that these numbers were cut into the post, and that it stood at a place where no reference points were available. This description imported no ambiguity into the patent, unless the post there described could be found, or unless its original location could be proved to be at some other point than at the place where the courses and distances located the corner."

The field notes in that case recited that a post 4 inches square and 4 feet long was set 2 feet in the ground, and that there was cut into it the respective number of the corner and number of the survey. The post found at corner No. 3, and which was claimed by the plaintiff to be in its original position, as stated in the opinion, "is round, 4 or 5 inches in diameter, about 3 feet high, and it sets loosely about 6 inches in the ground and is surrounded by a mound of stones. It is blazed on one side. A partial attempt has been made to square it at the top. No figures are cut into it. Someone has whittled or hewn off one side of the blaze, and upon this new blaze has faintly written with a lead pencil the figures '3-2309'."

One of the grounds upon which the judgment below was reversed was that the court refused to instruct the jury, as requested by the defendant, as follows:

"That a post which is round, blazed on one side, and bearing lead pencil marks or figures, not set in the ground, but set up in a mound of stones, does not fulfill the description of a post which calls for a post four inches square, four feet long, set two feet in the ground, and having the number of the corner and the number of the survey cut into said post."

And in instructing the jury as follows:

"That a stake such as described by the witness in this case as located at corner No. 3, is sufficient to meet the calls of the patent."

And at page 679, the court, having reached the conclusion that the judgment must be reversed, said:

"The result of our examination of this record is that this case must be again tried. At the coming trial two important issues may be presented: First, whether or not the round stake stands in the same place in which the square carved post called for by the field notes as the mark of corner No. 3 was originally located; * * * Upon the first issue the location of corners 3 and 4 by means of the monuments at corners 1 and 2 and the courses and distances described in the patent and in the field notes, run both forward and backward from corners 1 and 2, the relations of the disputed corners and lines upon the two theories advanced by the respective parties to the various ties and references in the patent and in the field notes of the Fortune claim, the testimony of the witnesses who knew the location of the original monuments, and other evidence which directly tends to prove or disprove the theory of either party, should be received."

The officers of the Land Department were of course familiar with the rules and regulations requiring that the boundaries of the claim should be accurately marked upon the ground and knew that according to the recitals in the field notes this had been done by the erection of a proper monument properly scribed at each corner of

the claim; and knew, therefore, that by following the course
 314 given in the patent from corner No. 2 in the direction of
 No. 3, that at that corner, when reached, whatever the distance might be, whether 1,500 feet or less, the monument called for in the field notes would be found designating it as the northwest corner of the claim; and so, also, as to corner No. 4.

The court, in its opinion, referring to the amendment of 1904 to section 2327, Revised Statutes, says that it

"Ought not to be permitted to revoke or modify the grant of a patent which the United States unquestionably intended to make and did make and which the patentee applied for, earned and received years before that amendment was enacted."

But is not this amendment declaratory or confirmatory of the rule announced in many decisions prior to its enactment?

In Second Lindley on Mines, Section 671, it is said:

" * * * In platting surveys in the surveyor-general's office the tie line reported by the deputy is naturally assumed to be mathematically correct. Subsequent surveys of adjoining or adjacent claims frequently develop the erroneous position of the prior tie line, and the result is a 'paper conflict' on the plats in the surveyor-general's office, although there are no such conflicts on the ground. Under such circumstances the former custom of the commissioner of the general land office was to hold up the second survey, and call on the claimant and patentee under the prior erroneous survey to surrender his patent, provided the claimant had already been granted a patent, and to commence patent proceedings anew. Frequently the patentee would refuse to do so, preferring to stand on his patent, thus creating an embarrassment which was difficult of adjustment.

"Whenever this situation has been presented to the courts, the erroneous tie line has been treated as a false call, which can be disregarded where the position of the claim as actually situated and monumented on the ground can be determined.

"The rulings of the land department on this question led to the passage of an act of congress amending section 2327 of the Revised Statutes, which requires full effect to be given to the lines actually marked, defined and established upon the ground by the monuments of the official survey, and in case of any conflict between the monuments of patented claims and the descriptions contained in
 315 the patents, the monuments on the ground shall govern and
 erroneous or inconsistent descriptions or calls in the patent descriptions shall give way thereto."

"This is but a statutory confirmation of the law as previously construed by the courts, and the practice of the land department is now in accord with these principles."

Again, in the opinion of this Honorable Court, it is said that the department adjudged and conveyed to the patentee a tract described by course- and distances:

"Carefully describing the two posts at the east end of the claim mentioned in the field notes and as carefully disregarding and omitting all reference to the posts at the west end of the claim mentioned in the field notes, and adjudging a second course to be south 60 degrees 45 minutes west 1,500 feet to corner No. 3."

But it is not to be doubted that one of the purposes of the statute and of the regulations in requiring that before an application for patent is filed, there must be an official survey of the claim and that in such survey the accurate boundaries of the claim shall be distinctly marked by monuments on the ground, was protection to the owners of conflicting claims, by thus admonishing or informing them just what the boundaries of the claim were, for which the application for patent was to be made. But clearly this wise and beneficent purpose of the law would be wholly defeated if the department may, by inserting in the patent a description of the claim by courses and distances simply, and which carefully omits any reference to either of the monuments mentioned in the field notes as having been erected by the Surveyor at the corners of one end of the claim when he surveyed the same, caused to be granted to the patentee a claim of 1,500 feet in length, notwithstanding the claim as monumented, in obedience to the statute and the regulations of the department, is substantially short thereof.

Moreover, in this case, it appears from the record that there was never any location made of the Conkling mining claim which embraced any portion of this 135.5 foot strip. As has been already shown, the ninth paragraph of the regulations directs that the return by deputies of all official surveys shall include the certificate of the deputy that the survey reported by him embraced the identical ground described in the notice of location and found within the stakes upon the ground. (See also, *Lincoln Placer*, 7th Land Decisions, p. 81, at p. 82.) This paragraph of the regulations also required that there should be filed with the return of the deputy the affidavit of two competent, disinterested witnesses, that the survey embraces the identical ground described in the notice of location. Now, accompanying the field notes of the survey of the Conkling there is found the following certificate:

"I hereby certify that the survey of the Conkling lode mining claim in Uintah Mining District, Summit County, Utah,—of which the foregoing are the true and original field notes—was made strictly in accordance with the location notice and boundary stakes so as to embrace the identical ground located as is shown by the accompanying affidavits of Geo. Jacobsen and Nils Sundberg, two disinterested witnesses,

A. JESSEN,
U. S. Dep. Min. Surveyor."

It will be presumed that the applicant for patent gave sufficient heed to his own interest to observe whether or not the boundaries of the claim as marked in the official survey thereof embraced the area which he claimed to be entitled to.

Furthermore, it appears from allegations found in the amended Bill of Complaint and admission thereof, found in the amended answer thereto, that at the time the Conkling mining claim was surveyed, and patent applied for, substantially all of this 135.5 foot strip was covered by prior valid locations, namely, Custer No. 2 and Silver Hill No. 4.

In paragraph 14 of the Amended Bill, it is alleged (Tr. pp. 11-12) that during the month of April, 1907, defendant's grantor, Kearns-Keith Mining Company, purchased from the Belmont Mining Company the Custer No. 2 and Silver Hill No. 4 lode mining claims, then owned by the said Belmont Mining Company; that said Custer No. 2 and Silver Hill No. 4 lode mining claims, survey No. 4850, were by letters patent, dated June 2, 1904, granted by the United States of America to Belmont Mining Company:

"That said patent was based upon location notices antedating the location of said Conkling lode mining claim; that as patented, said Custer No. 2 and Silver Hill No. 4 lode mining claims, overlap and include a large area of said Conkling lode mining claim as patented and described in the patent thereof and herein, including within said overlap all of the area of said Conkling lode mining claim included within the southwest 135.5 foot strip thereof, except only a small area at the northwest corner of said Conkling lode mining claim as herein described and particularly included within said overlap, all that portion of said 135.5 foot strip wherein said ore was discovered and contained as aforesaid."

And in the Amended Answer (Tr. pp. 51-52) it is alleged that on the 6th of April, 1907, Thomas Kearns took and received an assignment of an option theretofore given and granted by the Belmont Mining Company to one Rohlfing to purchase said Custer No. 2 and said Silver Hill No. 4; that thereafter and on the 10th of April, 1907, said Kearns did offer to assign and transfer said option to the Silver King Mining Company, which offer was accepted; that the company thereupon directed that the deed from the Belmont Company should be taken in the name of said Kearns, as trustee, for the King Company, to be conveyed by him to its nominee; that on the 12th of April, 1907, the Belmont Company did convey Custer No. 2 and Silver No. 4 to said Kearns, as trustee, and thereafter and upon the incorporation of this defendant, the said Kearns did convey said claims to this defendant.

"And this defendant admits that the said Custer No. 2 and said Silver Hill No. 4 lode mining claims were letters patent of the United States dated June 2, 1904, granted to the Belmont Mining Company, and admits that said patent was based upon location notices antedating the location of said Conkling lode mining claim."

(Each and all of the allegations contained in paragraphs 14, 17 and 19 (Tr. pp. 51-57) of the Amended Bill, as a basis for the contention that defendant should be adjudged and decreed to have acquired title to the Custer No. 2 and Silver Hill No. 4, in trust

for the plaintiff, as to an undivided three-fourths interest, and each of them is specifically denied in the Amended Answer. At the trial no attempt was made by plaintiff to establish any of the allegations upon which that contention was founded.)

(The patent to the Custer No. 2 and Silver Hill No. 4 were introduced in evidence and marked Exhibit Y. The description therein contained shows that there was thereby conveyed to the Belmont Mining Company all of the 135.5 foot strip, except a very small portion at the northerly end thereof; and that no part of the Conkling lying easterly of this strip was so conveyed.)

III.

The right of appellee to follow the Crescent fissure vein extralaterally between planes drawn vertically downward through the located side lines of these claims should, under the evidence adduced, be recognized and upheld. True, there is a presumption arising from the patents that the location of these claims, severally, was based upon the discovery of a vein which at its top and on its course traversed the claim from end to end. Or at least, that the locator so believed at the time he made his location. But

318 this, of course, is a rebuttable presumption, and we cannot but think that it was clearly overcome by the evidence which is found in the record and which is unchallenged, namely, that today there is not found any such vein in either of these claims—that there is not now found or known to exist in either of them any vein other than the Crescent fissure, except some minor cracks or seams from one to two inches wide, and that the course of all of these is substantially at right angles to the side lines. (Testimony of Mr. Blood, pp. 151-2, and Mr. Wiley, pp. 147-8.)

As said in the opinion of this Honorable Court, the discovery pit of the respective claims is but an insignificant portion of the ground covered. But the testimony, undisputed, is that the claims are throughout covered by wash or debris to depths varying from 20 to 40 feet (Brooke, p. 100), and that apart from work done in the development of the apex of the Crescent fissure vein but little work has been done within the boundaries of either claim. Such workings, slight as they are, were examined by witnesses for appellee, who agree in saying that there is not found in them any vein or seam, even, the course of which is not practically at right angles to the located side lines. And as to the discovery pits themselves, it appears that they could not have been more than a comparatively few feet in depth. Some loose earth had fallen into them and the bottoms thereof were not seen. But from the amount of material removed in their excavation, any intelligent observer could determine with approximate certainty the depth, and from the character of such material could say whether it was merely surface wash or whether any part of it was from rock in place. And both Blood and Wiley testified, to their belief, that neither of these pits had reached bed rock.

At the trial appellant offered no evidence, made no attempt, to

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that there was found or known to exist either at or beneath the surface of either of these claims any vein or lode, or any crack or even, the course of which was not at right angles to the side lines. In this regard appellant relied solely upon the supposition arising from the direction in which the claims had been located and patented. In the brief of appellant it is said, at page 1, that the supposition that there is any vein running through the so-called discovery points or pits would probably be contrary to the fact. What more satisfactory, not to say conclusive, could be presented to overcome the presumption that these claims were laid upon discovery veins the course of which was in the direction of the side lines thereof, than that there is not now in either claim any such vein or lode. If none can now be found the strike of which is not at right angles to the side lines of the claim, it is certain that none could have been found by the locator which ran lengthwise thereof.

It is said in the court's opinion, that for twenty-five years no claim was made by the owners of the Brave Columbia, etc., for the Crescent fissure vein was the discovery vein and that the owners were mistaken as to the course thereof, and that in the meantime the Conkling and many other claims had been located. But the evidence shows that this vein was discovered and followed in its general course extralaterally by appellant's predecessors many years before this suit was instituted. For instance, Mr. Wiley testified that the Constitution tunnel (so marked upon map, Exhibit A,) an old caved working run through the wash for a distance of about 100 feet, where it encountered the foot wall of the vein. (To this effect is the testimony of Mr. Blood, page 113.) Mr. Wiley testified that from this tunnel the vein can be followed in its general course through old workings. At page 134 he says that there are old drifts from level No. 3 and that the drift from the Constitution tunnel can be followed to the west (should be "east") to what appears to have been an old winze and old stopes showing considerable ore. And Mr. Daly, at page 107, says:

"(meaning the ore) continued on up through to level No. 3 and stopped with that stope there. When I got up within 15 or 20 feet from the Antelope drift I ran into old workings stoped out that had been stoped before my time. There was an old stope there below the Antelope drift partially caved, and ore around the edge of it. I did not follow the Antelope tunnel."

The drift from the Antelope tunnel, referred to, is shown upon Exhibit A, and is so designated thereon. And the stope referred to by Daly is also shown upon this exhibit as extending up to level No. 3, marked "stope" and having therein the stations "633," "634." The bottom of this stope is, measured horizontally, 230 feet beyond the southerly end line of the Constitution, and 100 feet beyond the southerly end line of the Brave Columbia. When this old work was prosecuted the record does not disclose.

It was done by the Crescent Company and must have been as early as 1892.

For Brooks (p. 96) testifies:

"I think the last work was done by the Crescent Company about 1892; but there was work done in there in a small way afterwards."

(The witness was here speaking of the workings of the Crescent Company as a whole, and not in any particular place.)

Daly says (p. 104) that it was old work when he took charge, which was in 1902.

320 As said in Second Lindley on Mines, Section 584, a liberal spirit is exhibited by the courts in recent years in interpreting the mining laws, with a view to upholding the extralateral right of the locator whenever it can be done, without violence to the letter or obvious intent of the law. Consolidated Wyoming Gold Mining Co. vs. Champion Mining Co., 63 Fed. 540, 548-9; Tyler Mining Co. vs. Last Chance Mining Co., 71 Fed. 848, 851; Del Monte M. Co. vs. Last Chance M. Co., 171 U. S. 55, 91.

Neither the appellant nor any of its predecessors, could have located a claim upon this segment of the Crescent fissure vein after the location of the Brave Columbia, Constitution and Delaware claims, which covered the top or apex thereof, for there can be no valid location of a mining claim which does not include the top or apex of the vein. First Lindley on Mines, Section 71; Calhoun Gold Mining Co. vs. Ajax Gold Mining Co., 182 U. S., 499, 508.

The issuance of a patent to a mining claim raises a conclusive presumption that prior to the official entry the applicant for patent had discovered a vein and made a valid location thereon, covering the top or apex thereof. Now, if many years thereafter it is found that there is not within the boundaries of such claim any vein or lode, save one, which at its top and on its course crosses the located side lines, it would seem that it might reasonably be concluded, nothing else appearing, that this was the discovery vein, that the course thereof had been mistaken by the locator, and his right to follow the same extralaterally between planes drawn through the located side lines upheld. It would seem impossible that any locator could have any motive in knowingly and intentionally locating his claim cross-wise of the vein he discovered, thus acquiring (as here) but 200 feet in length thereon when he could secure 1,500 feet in length by laying his claim properly. The granting of this right could not injure or prejudice any subsequent locator of an adjacent mining claim. As said by the trial court in its opinion:

"The locator of the Conkling presumably wished to obtain title to a vein apexing therein. As to other veins passing on their dip at great depth beneath the surface of the Conkling he knew that he would take subject to the right of the locator of the apex. It is evident that he was in no way influenced by the shape of the defendant's locations. If the locator of the defendant's claims innocently mistook the direction of this vein the only loss proper to be imposed upon him is the disappointment of his anticipation as to

the extent of apex he was acquiring. He in no way wronged subsequent locators."

321 & 322 Through the years appellee and its predecessors have developed this segment of the vein to a great depth, nearly 2,000 feet. To take from appellee now a valuable part of that which has thus been developed and award it to appellant, when neither it nor any of its predecessors, could ever have laid a valid location thereon, and who expended not a dollar in the development thereof, would seem to be so unjust and inequitable that the courts would not yield assent thereto, save in obedience to the plain command of the statute.

Respectfully submitted,

WILLIAM H. DICKSON,
Solicitor for Petitioner and Appellee.

A. C. ELLIS, JR.,
RUSSELL G. SCHULDER,
THOMAS MARIONEUX.

Of Counsel.

We, W. H. Dickson and Thomas Marioneaux, of counsel for the petitioner and appellee in the above entitled cause, do hereby certify that we believe error is found in the decision of this Honorable Court in said cause and that a rehearing therein should be granted in order that justice may be done.

W. H. DICKSON,
THOMAS MARIONEUX.

Dated, Salt Lake City, Utah, April 3, 1916.

(Endorsed:) Filed in U. S. Circuit Court of Appeals, Apr. 7, 1916.

323 (*Order Denying Petition for Rehearing.*)

May Term, 1916.

Friday, June 9, 1916.

This cause came on this day to be heard upon the petition for a rehearing, filed by counsel for appellee.

On consideration whereof, it is now here ordered by this Court, that said petition for a rehearing of this cause, be, and the same is hereby, denied.

June 9, 1916.

(*Clerk's Certificate.*)

United States Circuit Court of Appeals, Eighth Circuit.

I, E. E. Koch, Clerk of the United States Circuit Court of Appeals for the Eighth Circuit, do hereby certify that the foregoing contains the transcript of the record from the District Court of the

United States for the District of Utah, as prepared and printed pursuant to the designation of appellant under the rules of the United States Circuit Court of Appeals for the Eighth Circuit, under the supervision of its Clerk, and full, true and complete copies of all the pleadings, record entries and proceedings, including the opinion, had and filed in the United States Circuit Court of Appeals, except the full captions, titles and endorsements omitted in pursuance of the rules of the Supreme Court of the United States and the Motion of Appellee for an Order staying Mandate, Request of Counsel for Appellant to be heard on said Motion, Notice to Appellant of Hearing on Motion for stay of Mandate, Appearance of Mr. W. H. Herdman as counsel for appellant and Order of Submission of said motion for stay of mandate whereby leave is granted to file affidavits in support of and in opposition to said motion for stay of mandate, which said matters are omitted by request of counsel for appellee, in the case of the Conkling Mining Company, Appellant, vs. Silver King Coalition Mines Company, Appellee, No. 3977, as full, true and complete as the originals of the same remain on file and of record in my office.

324 I do further certify that on the thirty-first day of October, A. D. 1916, a mandate was issued out of said Circuit Court of Appeals in said cause, directed to the Judges of the District Court of the United States for the District of Utah.

In testimony whereof, I hereunto subscribe my name and affix the seal of the United States Circuit Court of Appeals for the Eighth Circuit, at office in the City of St. Louis, Missouri, this fifteenth day of July, A. D. 1919.

[SEAL.]

E. E. KOCH,
*Clerk of the United States Circuit Court
of Appeals for the Eighth Circuit.*

325

(Certificate.)

United States Circuit Court of Appeals, Eighth Circuit.

I, E. E. Koch, Clerk of the United States Circuit Court of Appeals for the Eighth Circuit, do hereby certify that the foregoing copy of the printed record in the case of Conkling Mining Company, Appellant, vs. Silver King Coalition Mines Company, No. 3977, contains the record upon which said cause was heard and determined in this Court and is the record in the case referred to in the stipulation of parties appearing at page 546 of the printed record transmitted to the Supreme Court of the United States as a return to the writ of certiorari granted by said Supreme Court in the two cases of Silver King Coalition Mines Company, Appellant, vs. Conkling Mining Company, and Conkling Mining Company, Appellant, vs. Silver King Coalition Mines Company, Nos. 5188 and 5190.

I do further certify that the foregoing printed record also contains all the proceedings in this Court as prepared for use on an application to the Supreme Court of the United States for a writ of certiorari.

In testimony whereof, I hereunto subscribe my name and affix the

seal of the United States Circuit Court of Appeals for the Eighth Circuit, at office in the City of St. Louis, Missouri, this tenth day of December, A. D. 1920.

[Seal of the United States Circuit Court of Appeals, Eighth Circuit.]

E. E. KOCH,
*Clerk of the United States Circuit Court
of Appeals for the Eighth Circuit.*

326 [Endorsed:] File No. 27244. Supreme Court U. S., October Term, 1920. Term No. 158. Silver King Coalition Mines Co., petitioner, vs. Conkling Mining Company. Supplemental record. Filed December 20, 1920.

(2858)